

ORILAND
What Origami Can Be!

Origami Shadowbox Frames

Yuri & Katrin Shumakov



Origami Office Series

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Introduction

ORIGAMI SHADOWBOX FRAMES is a book from Origami Office Series by Oriland authors that will teach you how to make original origami shadowbox frames. They are wonderful for displaying pictures and various artworks!

Do-It-Yourself – fold these fabulous modular shadowbox frames, originally designed by Yuri and Katrin Shumakov. Different designs of deep and shallow frames feature various profiles such as 1:2 rectangle, square, equilateral triangle, right triangle, isosceles trapezoid, right trapezoid and stairs-like profile. Each profile has its own advantage for creating an inviting display. You will learn how to fold different variations of each design, customize frames to your liking and add back pieces. With these origami frames you can create a beautiful display of artworks and photos at your home and work.

There are 640 detailed step-by-step colorful diagrams with extensive comments and 175 illustrations, placed on 127 pages that will guide you through folding the 10 original origami designs of the Oriland style, branching into 20+ variations. The models are intermediate and complex level of folding and are a good challenge for the novice and the expert alike. Happy folding!

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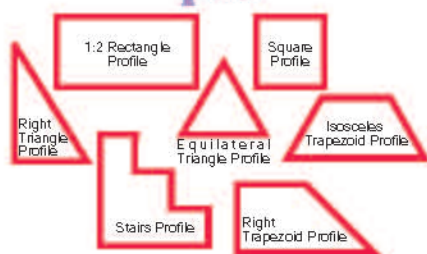
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Contents: 10 origami-designs
Price: US\$9.50

Photos, texts, diagrams, cover design: Katrin and Yuri Shumakov

NOTE: The diagrams from this book may be printed out only for personal use, and may not be redistributed or republished in any way without the express written consent of the creator. For information, address info@oriland.com

Photo Gallery

Origami Shadowbox Intro
p.6



Deep Shadowbox Frame
(1:2 Rectangle Profile, 4 Modules)



p.8



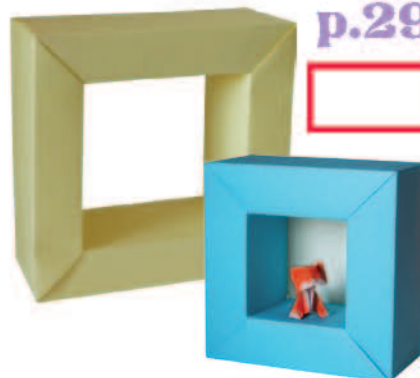
Shallow Shadowbox Frame
(Square Profile, 4 Modules)

p.35



Deep Shadowbox Frame
(1:2 Rectangle Profile, 2 Modules)

p.29



Shallow Shadowbox Frame
(Square Profile, 2 Modules)

p.47



Shadowbox Frame
(Equilateral Triangle Profile)



p.53



Shadowbox Frame
(Right Triangle Profile)

p.67



Shadowbox Frame
(Isosceles Trapezoid Profile)

p.79



Shadowbox Frame
(Right Trapezoid Profile)

p.92



Deep Shadowbox Frame
(Stairs Profile)

p.105



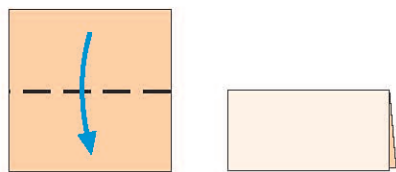
Back Piece
(for Custom Frame)

p.123

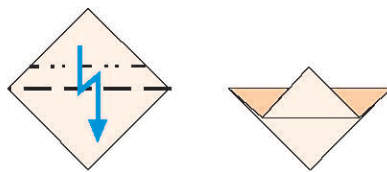


Origami Symbols

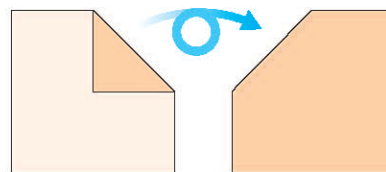
These simple origami symbols will help you to read diagrams of folding



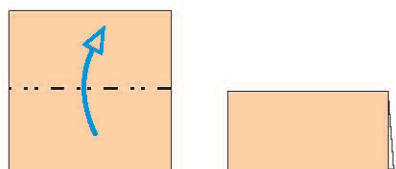
Valley fold



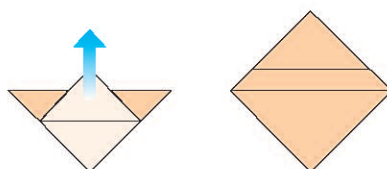
Step fold



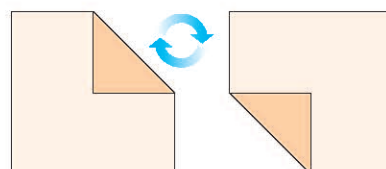
Turn the paper over



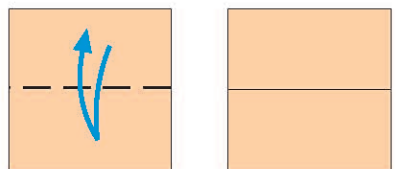
Mountain fold



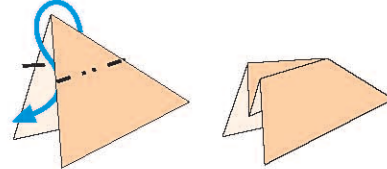
Pull out



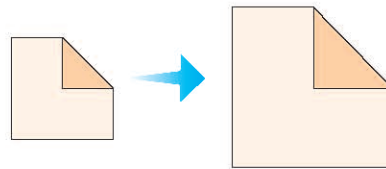
Turn the paper around



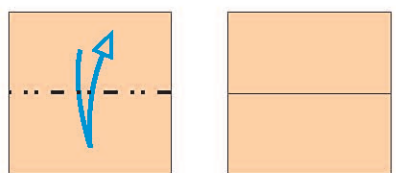
Valley fold and unfold



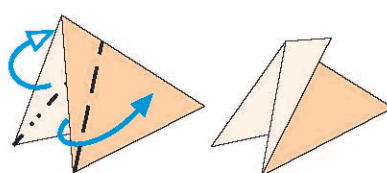
Inside reverse fold



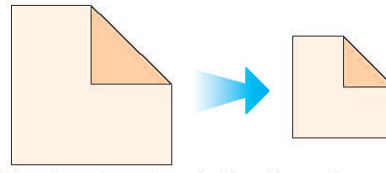
Enlarging the following diagram



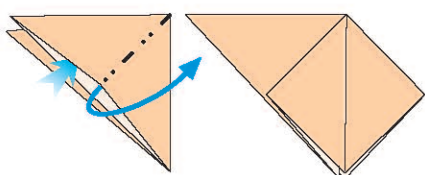
Mountain fold and unfold



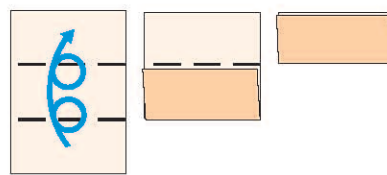
Outside reverse fold



Reduction the following diagram



Open and squash



Fold the paper over and over

Push in. Sink



X-ray view



Level of folding

- ★☆☆☆☆ Simple
- ★★☆☆☆ Simple-Medium
- ★★★☆☆ Medium
- ★★★★☆ Medium-Complex
- ★★★★★ Complex

The system of levels of folding is more as a guide line, an approximate approach just to orient you and mostly depends of your skills in paper folding. If you are a novice, even the simple level can be challenging for you. And if you are already a connoisseur even a complex model can be simple for you.

Origami Shadowbox Intro

Let's us to welcome you into this creative world of origami that is magical, beautiful and inspiring!

All this origami shadowbox theme has started for us with our miniature oribana project when we were preparing a display of our miniature floral compositions and tried to find deep shadowbox frames that would be suitable for displaying delicate paper artworks. We were looking through many wooden and plastic frames, but didn't find anything decent and aesthetically pleasing that would approach to our ideas... It was that moment when you decree: "If you want something done, do it yourself!" And when you think there is no way, the right idea might just sparkle, starting the whole array of solutions. And origami art has its magic power to help you!

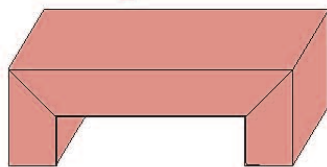
At this point Yuri said, "We have origami at our hands, do we not? And I have an idea for an origami frame..." Soon after he came up with a perfect design of a deep shadowbox frame that was exactly what we needed for our miniature oribana display. Then he started to create one frame after another and it wasn't too long before we had the whole collection of origami frames of various shapes and profiles. So we decided to write a book about these origami frames and share the original ideas on how origami can be useful in gallery display matters.

The shadowbox frames, presented in this book are modular, each made of 2 or 4 modules, depending on design. The modules connect without any glue - it's only origami magic in work here! The most frames are 4-module frames with two types of planks used - top/bottom plank and side plank. So, for each such frame we'll fold 1 top plank, 1 bottom plank and 2 side planks.

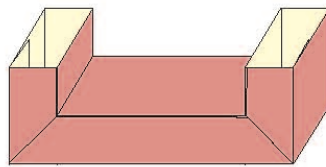


*Deep Shadowbox Frame
(1:2 Rectangle Profile, 4 Modules)
with Mini-Oribana 'Enticing'*

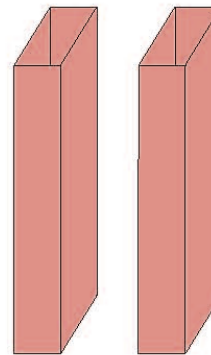
Top Plank



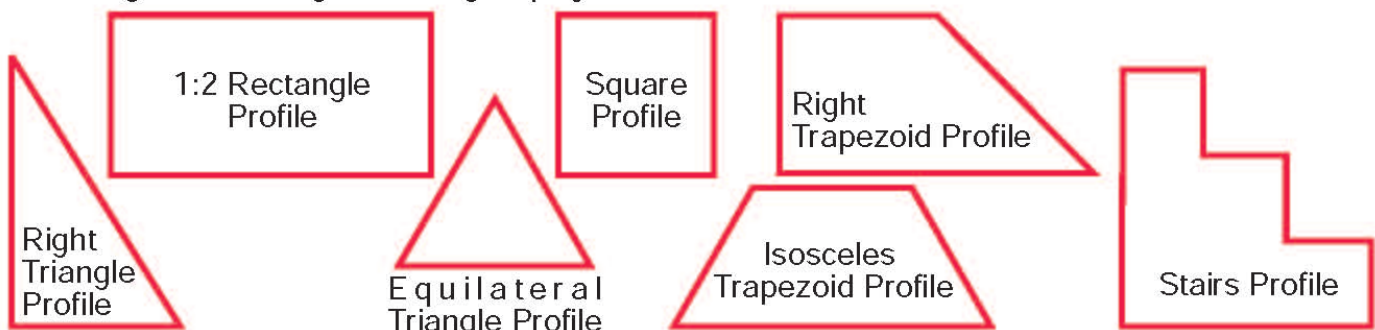
Bottom Plank



Side Planks



Besides this classic looking deep shadowbox frame with the 1:2 rectangle profile pictured here, the book offers different designs of frames with profiles that are vary from rectangular to triangular, trapezoid and even to the complex stair-like profile. Each profile has its own advantage for creating an inviting display.



Let's take a brief tour through some of the frames that feature various profiles in their designs.



 *Shallow Shadowbox Frame
(Square Profile, 4 Modules)
with origami vintage dress*




 *Shadowbox Frame
(Equilateral Triangle Profile)
with image 'Inspiring Asanas'*




 *Deep Shadowbox Frame
(Right Triangle Profile)
with origami collage*



 *Deep Shadowbox Frame
(1:2 Rectangle Profile, 4 Modules)
with artwork 'Happy Together'*



 *Deep Shadowbox Frame
(Right Trapezoid Profile)
with Mini-Oribana 'Spring Breath'*



 *Deep Shadowbox Frame
(Isosceles Trapezoid Profile)
with origami snowflakes*



 *Deep Shadowbox Frame
(Stairs Profile) with image
'Gift of Forest's Nymph'*

These origami frames are wonderful for displaying pictures and various artworks. In this book we are giving detailed instructions on how to make different variations of each design and customize frames to your liking. Also each article offers suggestions on paper and sizes as well as shows how to make a back piece for each particular frame. A separate article at the end of the book explains how to make a back piece for a custom frame.

The examples of the frames displayed in this book are featuring our original origami artworks as well as Katrin's photo artworks and paintings. Several times already we exhibited our miniature oribana compositions in these origami deep shadowbox frames and they proven to be rather effective to create a beautiful and engaging presentation. We also have created a pleasant display of our artworks and photos at home with these origami frames and think you can do too!

Hope you will enjoy this book with all the techniques presented here and make a variety of these beautiful origami shadowbox frames!
Happy folding!

*The Authors,
Katrin and Yuri Shumakov*

www.oriland.com

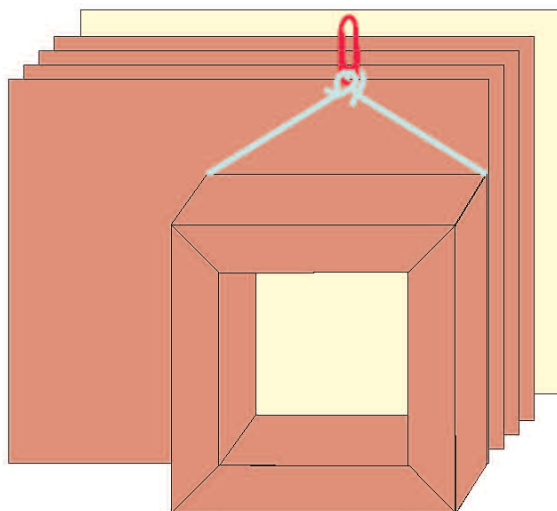


Deep Shadowbox Frame (1:2 Rectangle Profile, 4 Modules)

by Yuri Shumakov

This is an elegant design of a classic looking deep shadowbox frame with the 1x2 rectangle profile. It's perfect for displaying little origami models, for instance, Oribana compositions, or pictures.

You will need 4 rectangles, each for one side, and 1 piece of paper for the background. Also, optionally, for hanging (for a hanger) prepare a piece of line or thread that in length is a bit longer than the frame's perimeter. Fishing line works best for it. A paper clip will be useful for connecting the line's ends when hanging. The line will be integrated into the frame during folding.



1:2 Rectangle
Profile



Suggested sizes: Use rectangles somewhat close to 3:4 proportion. You may use regular sheets of A4 (30x21 cm) or Letter (11x8.5 inches) format. The size of paper for the background should be a bit bigger than the picture size of the resulted frame.

For instance, using sheets of Letter format, you may receive rectangular frames as big as the size of the Letter format itself, ie 11x8.5 inches. The maximum square frame will be 8.5x8.5 inches. Squares can be used for a mini frame.

Suggested paper: Paper should be strong and relatively thick. Copy paper works quite well. You may use various craft paper as well.

Suggested colours: It can be any colour you wish. It's good to use a lighter shade for the background, when the frame is meant for displaying little objects.

Out of the same set of rectangles, it can be folded into a rectangular or square frame of different sizes.



*Tall Rectangular Frame,
Large Square Frame*

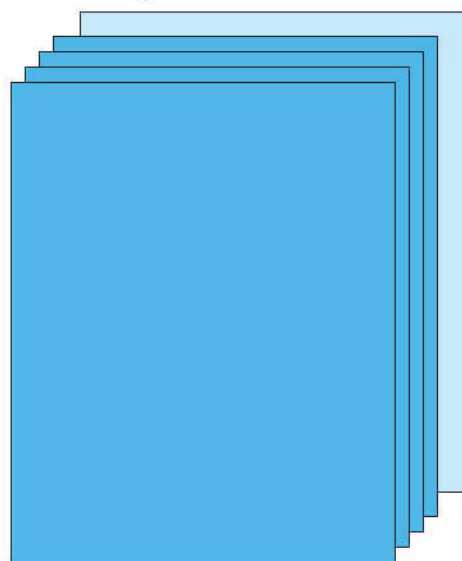


*Small Square Frame
with Mini-Oribana 'Enticing'*



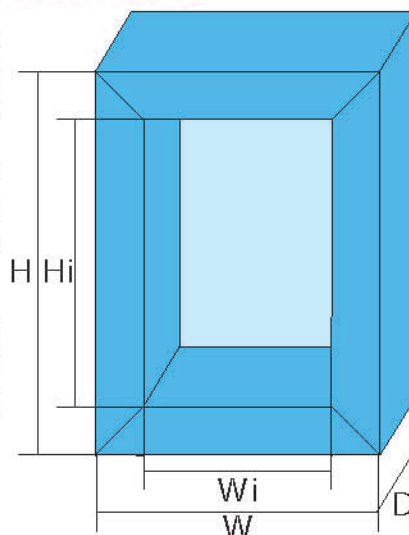
*Mini Square Frame
with Mini Fir-Tree*

Out of the same set of rectangles, say Letter format or any other format close to 3x4 in proportion, you can receive different sizes and shapes of the deep shadowbox frame: small, middle or large; square or rectangular.



There are two types of planks used in this design - top/bottom plank and side plank. For the frame we will need 1 top plank, 1 bottom plank and 2 side planks. All the planks share the first 6 steps of pre-folding and then fold differently and depending on options you choose.

The width and height of your frame will be determined in steps 7 and 8 of folding the planks, as the distance in the middle between the side flaps.

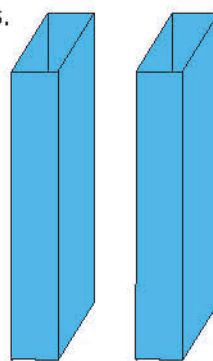
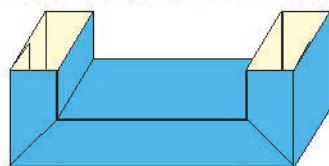


W - width
Wi - picture, width
H - height
Hi - picture, height
D - depth

Top Plank

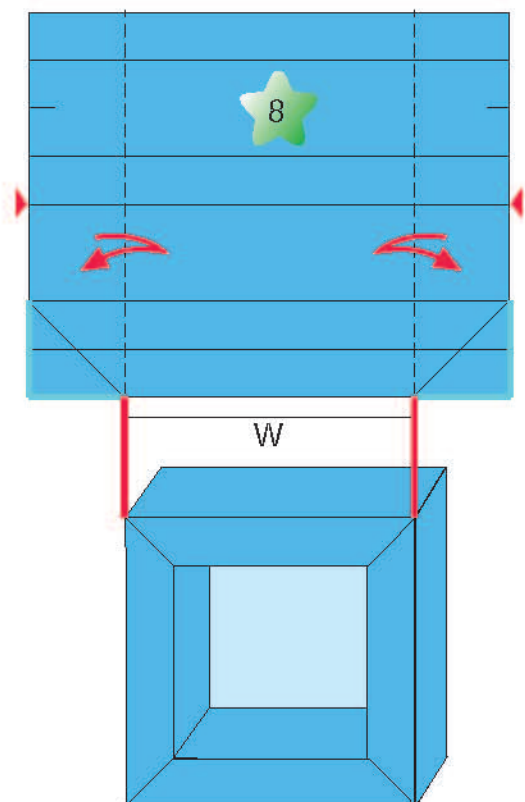


Bottom Plank



Side Planks

So here are some basic options for different sizes and shapes of the deep shadowbox frame.



Small Square Frame / paper format used	LETTER format, 8-1/2 x 11 inches	A4 format, 21 x 29.7 cm
width	6-3/4" (17.5 cm)	19.2 cm (7-1/2")
height	6-3/4" (17.5 cm)	19.2 cm (7-1/2")
depth	2-1/8" (5.3 cm)	5.25 cm (2-1/8")
picture, width	4-3/4" (12 cm)	14 cm (5-1/2")
picture, height	4-3/4" (12 cm)	14 cm (5-1/2")

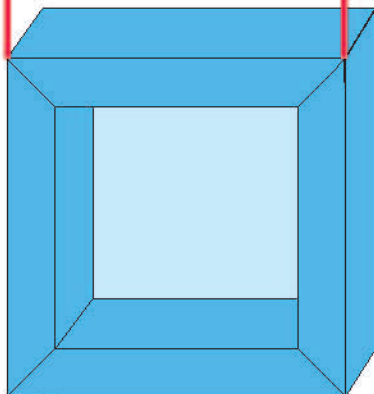
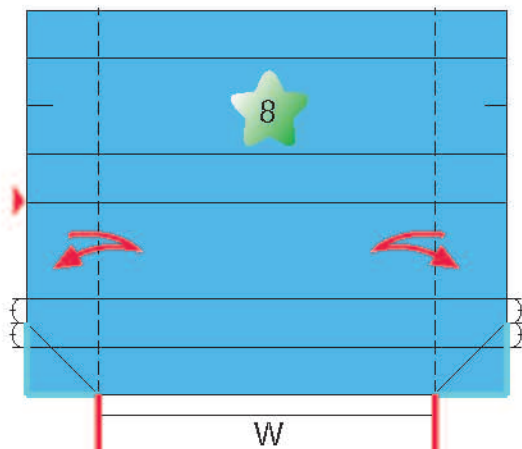
The base folding process in this article is shown for the small square frame. In steps 7 and 8 of folding the top/bottom planks, there will be marking-off as it is shown here. The resulted distance in the middle (W) will be the width of the future frame.

Since it's a square frame, the side planks have to be marked-off in the same way (in steps 7 and 8), so that the height (H) is equal to the width (W).



Small Square Frame with Mini-Oribana 'Enticing'

Middle Square Frame



The shown marking-off for both types of planks will result in the middle square frame. Make sure to do it in steps 7 and 8 of folding the top/bottom planks and side planks.

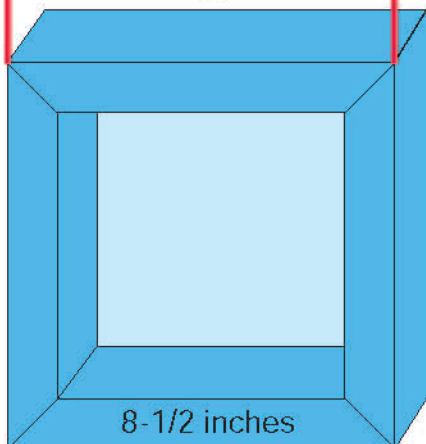
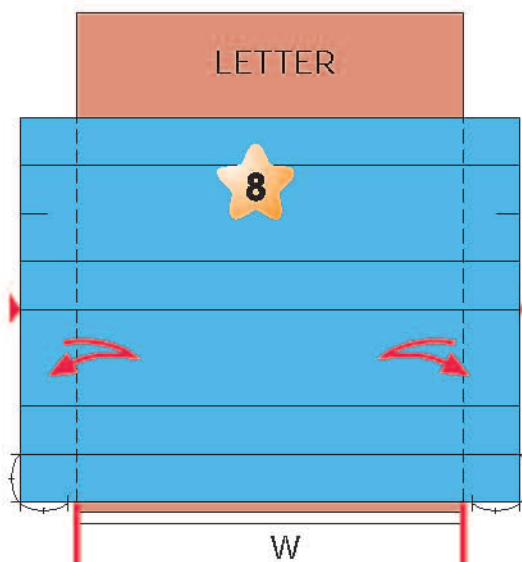
*Middle Square Frame
with Mini-Oribana
'Summer Dreams'*



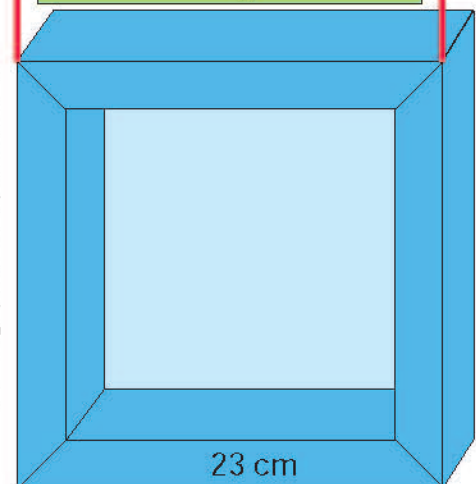
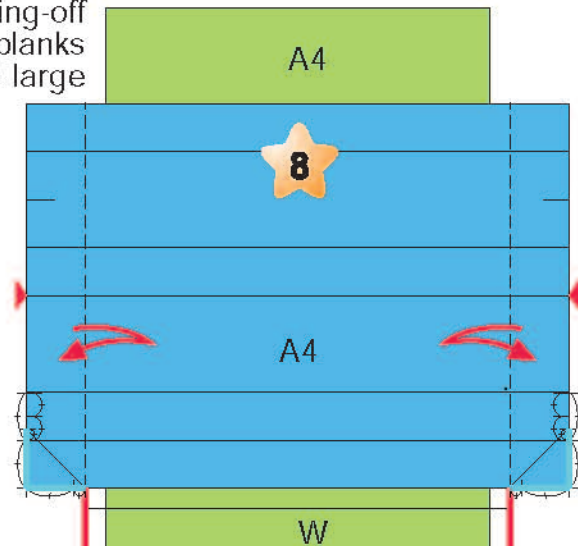
Middle Square Frame / paper format used	LETTER format, 8-1/2 x 11 inches	A4 format, 21 x 29.7 cm
width	7-3/4" (20 cm)	21.8 cm (8-3/4")
height	7-3/4" (20 cm)	21.8 cm (8-3/4")
depth	2-1/8" (5.3 cm)	5.25 cm (2-1/8")
picture, width	5-1/2" (14 cm)	16.6 cm (6-5/8")
picture, height	5-1/2" (14 cm)	16.6 cm (6-5/8")

Large Square Frame

The shown marking-off for both types of planks will result in the large square frame.

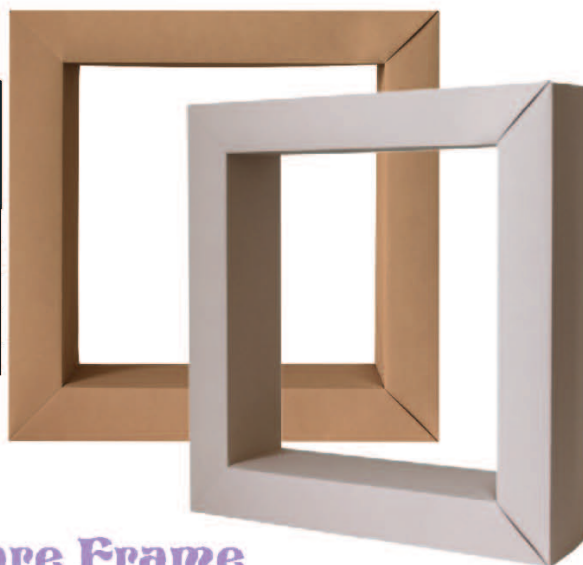


Make sure to do it in steps 7 and 8 of folding the top/bottom planks and side planks.



Note that due to the assembly specifics, the width of the side flaps should be bigger than the height of the lower horizontal section; the difference can be relatively small but it should exist. If you do any other custom width of your frame, keep it in mind.

Large Square Frame / paper format used	LETTER format, 8-1/2 x 11 inches	A4 format, 21 x 29.7 cm
width	8-1/2" (22 cm)	23 cm (9-1/4")
height	8-1/2" (22 cm)	23 cm (9-1/4")
depth	2-1/8" (5.3 cm)	5.25 cm (2-1/8")
picture, width	6-3/8" (16 cm)	18 cm (7-1/8")
picture, height	6-3/8" (16 cm)	18 cm (7-1/8")



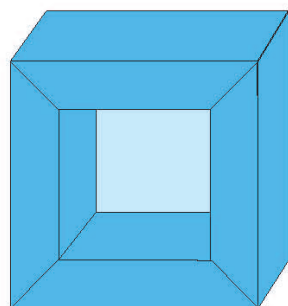
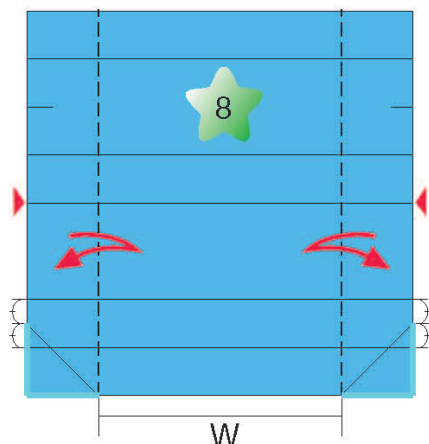
Mini Square Frame

If instead of rectangles you will use squares, then it will result in a mini frame of cute proportions. Follow the shown marking-off for planks to get such a square frame.

Make sure to do it in steps 7 and 8 of folding of the both types of planks - the top/bottom planks and side planks.



*Mini Square Frame
with Mini Fir-Tree*



Mini Square Frame / paper format used	8-1/2" square made from LETTER format	21-cm square made from A4 format
width	5-1/4" (13 cm)	12.5 cm (5")
height	5-1/4" (13 cm)	12.5 cm (5")
depth	2-1/8" (5.3 cm)	5.25 cm (2-1/8")
picture, width	3" (7.5 cm)	7 cm (2-3/4")
picture, height	3" (7.5 cm)	7 cm (2-3/4")

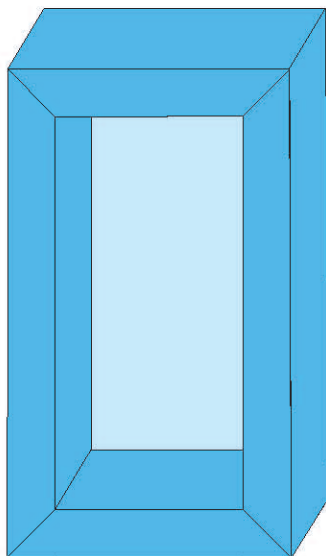
Rectangular Frames

Varying the size of planks allow to produce various rectangular frames. The maximum length of a side plank can be as long as the biggest side of the initial rectangle.

Of course, you can position your frame as you need - in a landscape or portrait way.

*Large Rectangular Frame
(8-1/2 x 11 inches) with
'Happy Together' artwork*

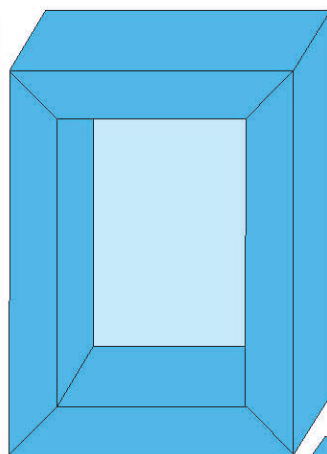




*Small Width,
Tall Height*

Small Rectangular

Small rectangular frames use the small size of the top and bottom planks and the middle or tall side planks.

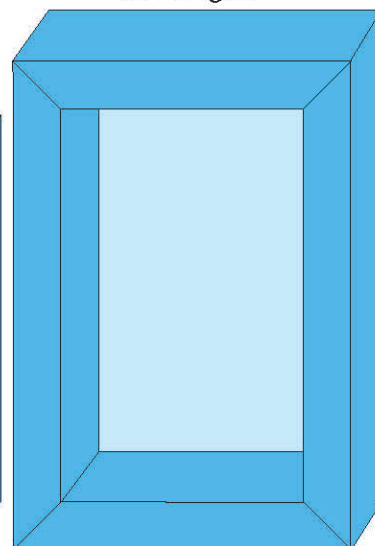


*Small Width,
Middle Height*

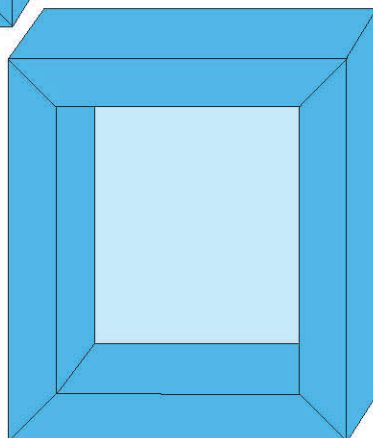
Middle Rectangular

Middle rectangular frames use the middle size of the top and bottom planks and the middle or tall side planks.

*Middle Width,
Tall Height*



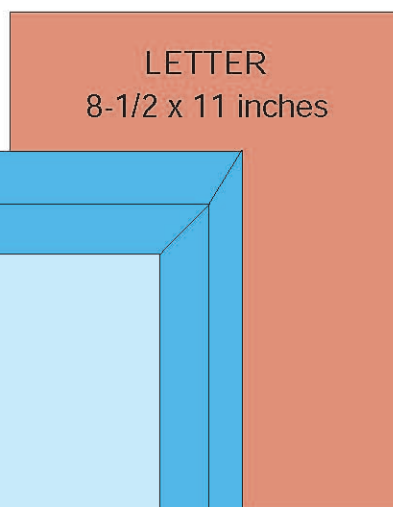
*Middle Width,
Middle Height*



Large Rectangular

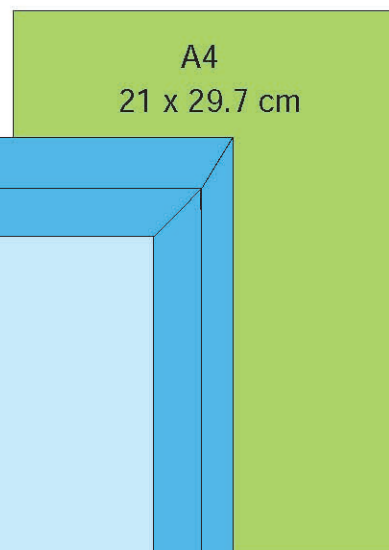
Large rectangular frames use the large size of the top and bottom planks and the tall side planks.

When using sheets of Letter format, the maximum size of the frame will be as big as the size of the Letter format itself, ie 11x 8-1/2 inches.



8-1/2 x 11 inches

*Large Width,
Tall Height*



23. x 29.7 cm

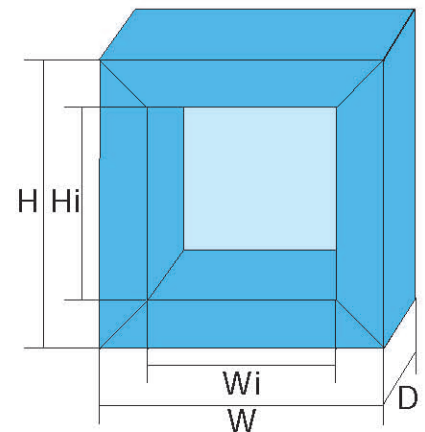
When using sheets of A4 format, the maximum size of the frame will be 23 x 29.7 cm which is even bigger than the A4 format itself.

Small Square Frame Folding

The base folding process in this article is shown for the small square frame.



For the frame we will need 1 top plank, 1 bottom plank and 2 side planks. All the planks share the first 6 steps of pre-folding and then fold differently.



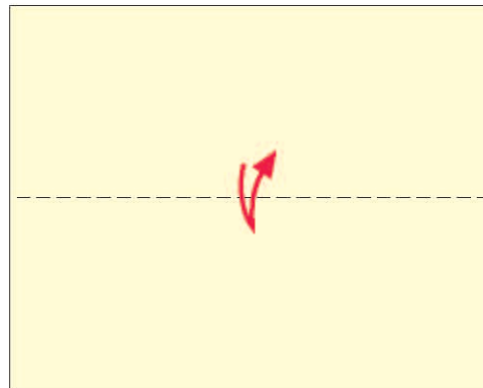
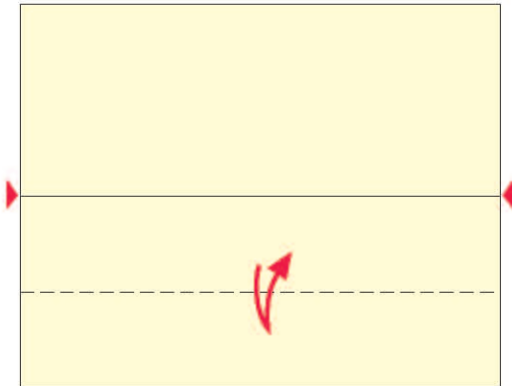
Plank Pre-Folding

If using two-colour paper, begin with coloured side down.

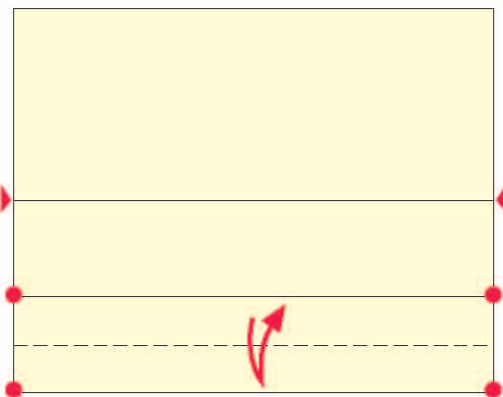
Place your rectangle longwise, coloured side down, as shown. Valley fold it in half from bottom to top. Press the fold flat and unfold it.

1

2 Valley fold the bottom edge to the horizontal middle fold-line. Press it flat and unfold it.



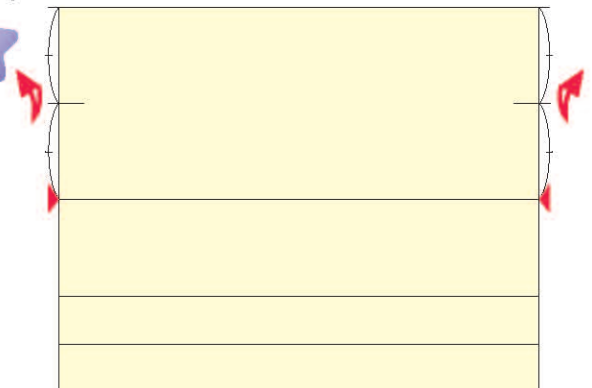
3



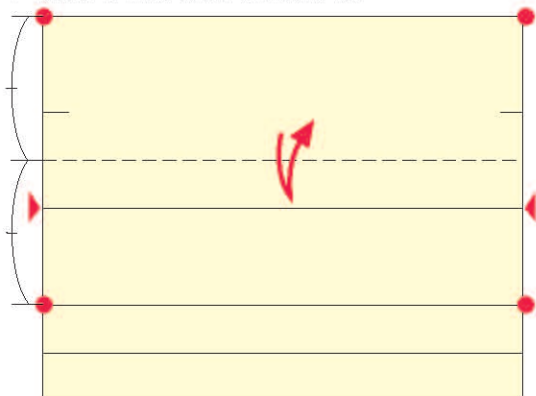
Now valley fold the bottom edge to the fold-line made in the previous step, so that the marked dots coincide. Press it flat and unfold it.

Working with the top half, make the tiny fold-marks on the sides as shown. Note, be careful to not make long fold-lines. If you use a very stiff paper then you may just do the marks with a pencil and a ruler.

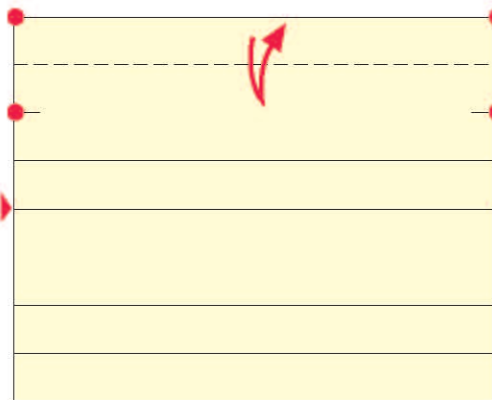
4



Valley fold the top edge down to meet the fold-line made in step 2, so that the marked dots coincide. Press it flat and unfold it.



5

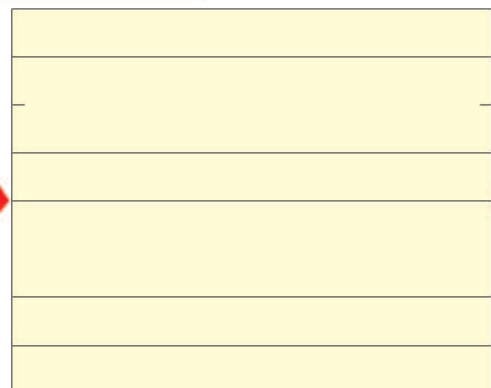


6

Valley fold the top edge down to meet the fold-marks made in step 4, so that the marked dots coincide. Press it flat and unfold it.

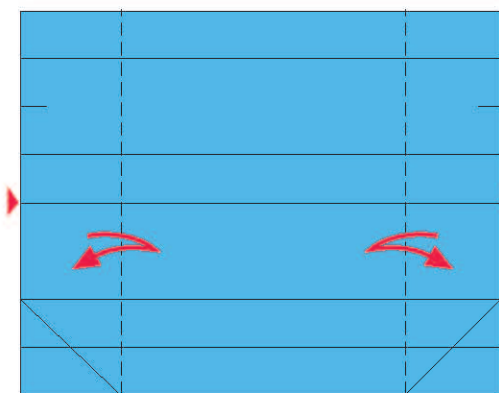
7

This should be the result. Now we have a pre-folded paper for a frame plank, no matter it's a side, top or bottom plank. Pre-fold other rectangles in the same way, so that you have 4 pre-folded rectangles for all the planks.



Top / Bottom Plank

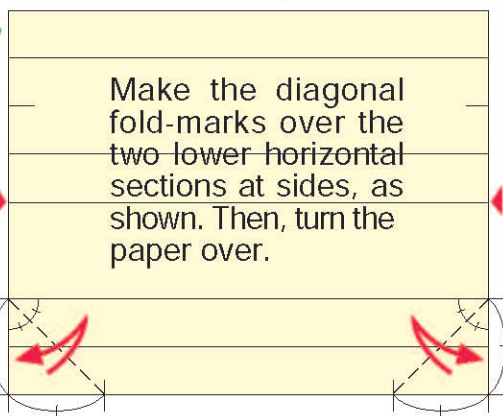
Working with the pre-folded rectangle, place it as shown. Now we are determining the width (W) of the future frame. The following marking-off is for the small frame. When using sheets of Letter format, the width will be 6-3/4 inches (17.5 cm).



8

Valley fold the right- and left-hand sides being guided by the intersections of fold-marks and the bottom edge as shown. Press the folds flat and unfold them. Turn the paper over.

7

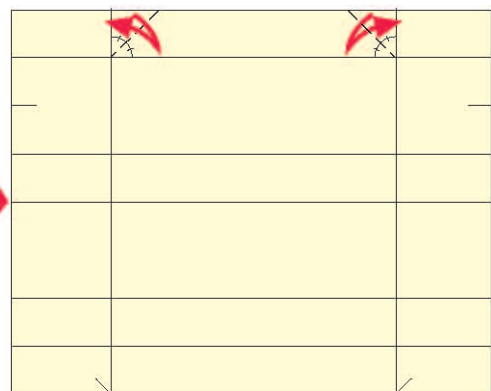


Make the diagonal fold-marks over the two lower horizontal sections at sides, as shown. Then, turn the paper over.

6

The resulted distance in the middle (W) will be the width of the future frame.

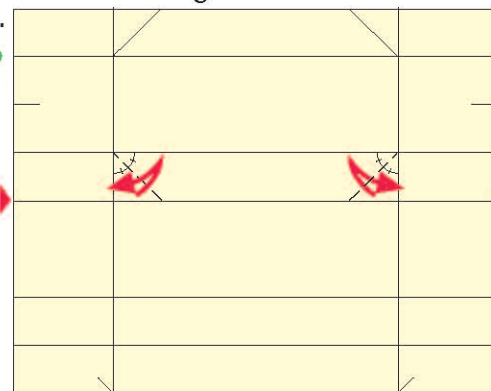
Working with the narrow horizontal section at the middle, by valley folding make the limited diagonal fold-lines as shown.



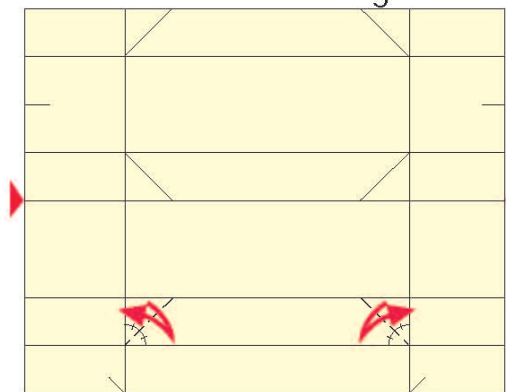
9

Working with the top horizontal section, by valley folding make the limited diagonal fold-lines as shown.

10

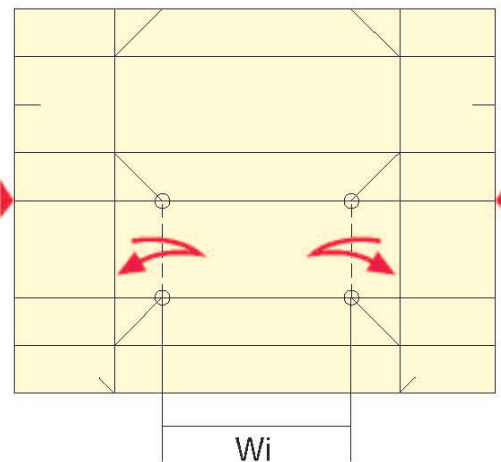


- 11 Working with the second from the bottom narrow horizontal section, by valley folding make the limited diagonal fold-lines as shown.



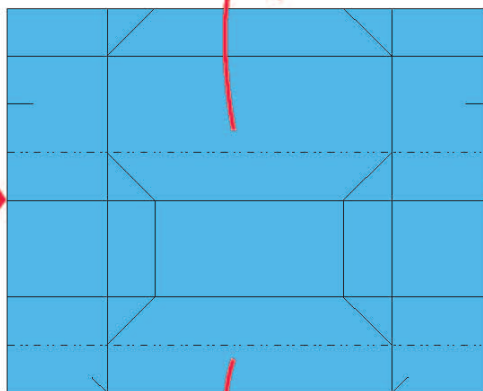
12

By valley folding, make the limited fold-lines between the intersections marked by the circles as shown. This will be the picture width (W_i) of the future frame.



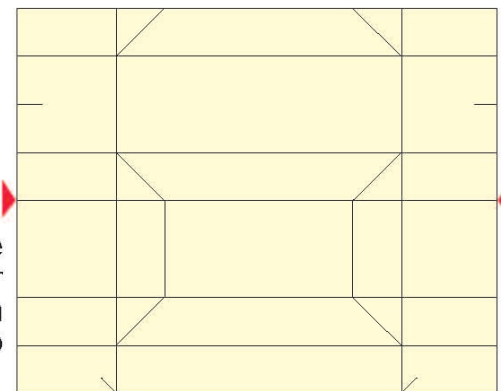
Mountain fold one narrow horizontal section at the bottom and two horizontal sections on the top as shown.

14



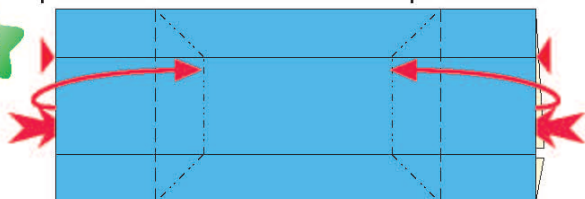
13

Turn the paper over (from side to side).



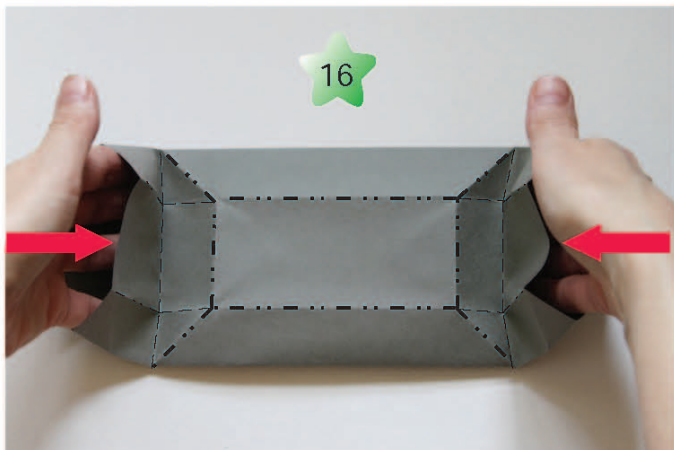
Separating the front layer from the back layers at sides and bring the side flaps up as shown in the next step.

15



Insert your hands into the side flaps as shown and gently move hands toward each other to shape the paper along the existing fold-lines into the position shown in the next step.

16



18

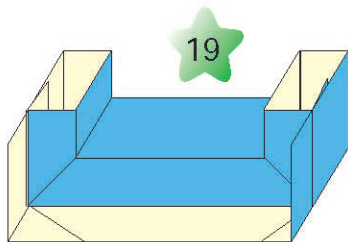


This should be the result.

17



We magically transformed the paper into a 3-dimensional form.

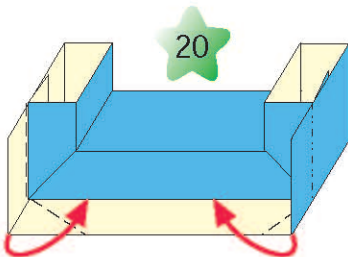


19

This should be the result.

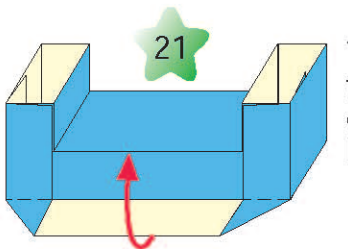
Bottom Plank

Optionally, for hanging purpose, a piece of line can be integrated into the frame in this point.



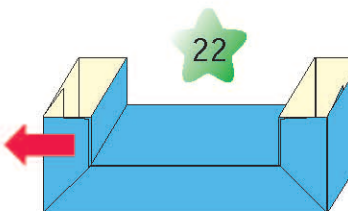
20

Along the existing fold-lines, close the side flaps as shown.



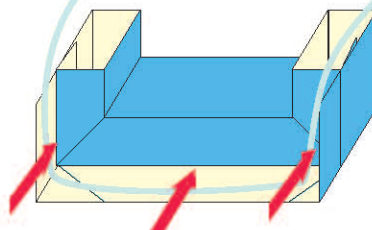
21

This should be the result. Now close the bottom flap.



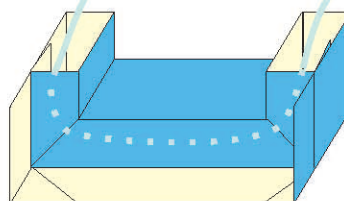
22

Pull out the left-hand side flap in order to prepare it for locking.

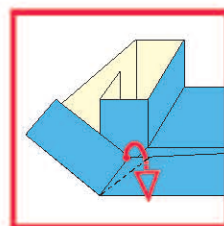


19

Place the piece of line or thread under the main construction and between the layers, as shown.

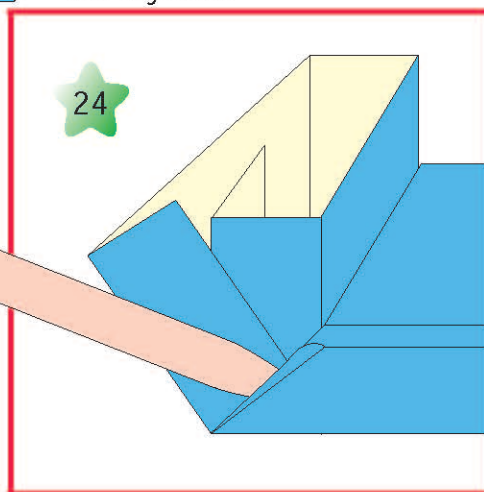


This should be the result.

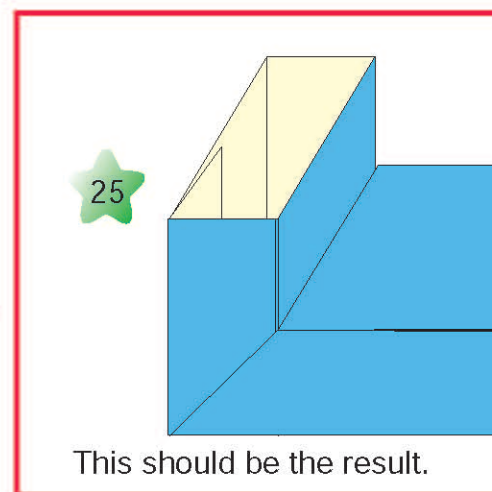


23

This should be the result. Working with the left-hand side flap, direct the "valley" fold into the pocket between the layers...



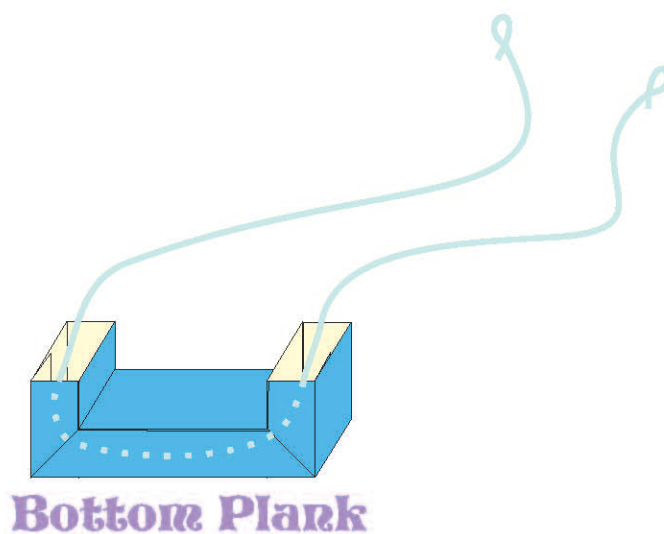
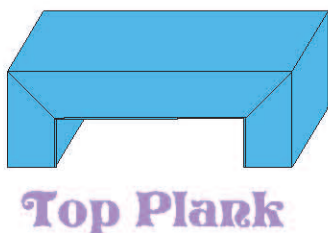
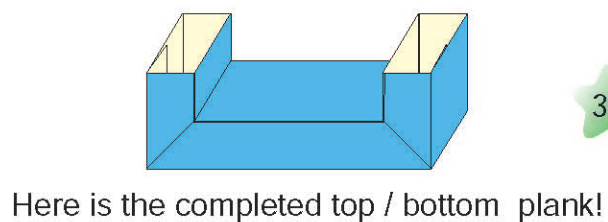
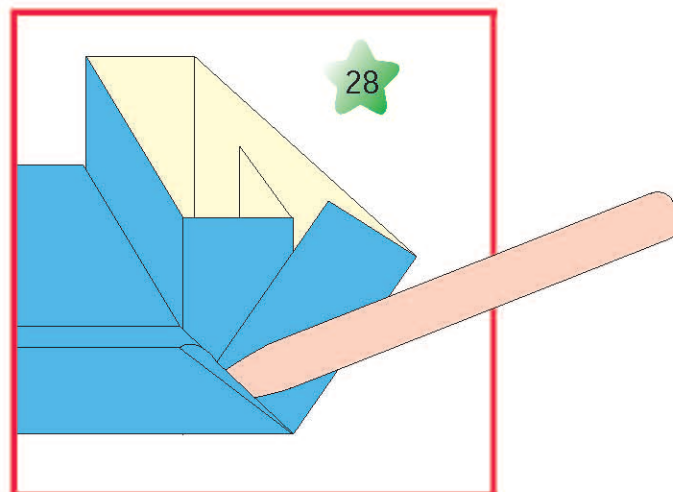
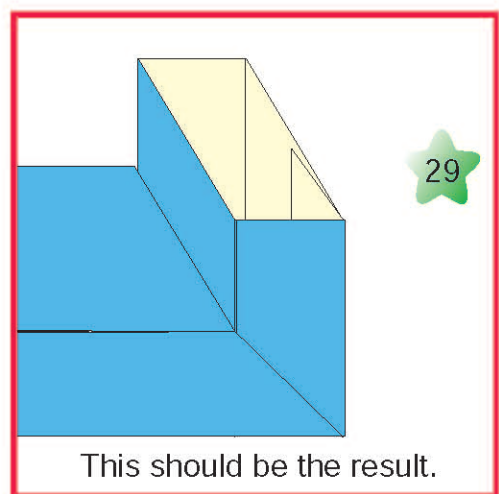
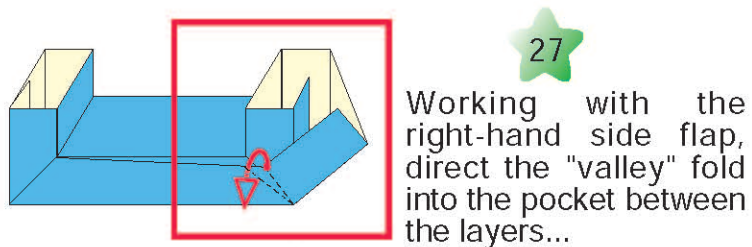
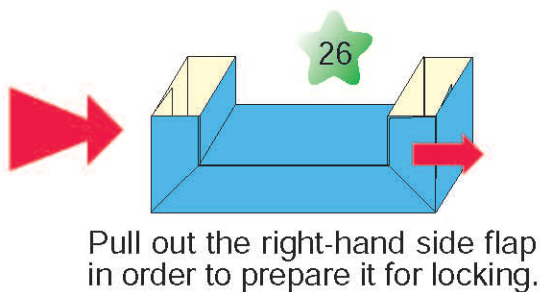
24



25

This should be the result.

...continue inserting the "corner" into the "pocket", thereby locking the side flap. The flat bone folder or something similar can help in this step.



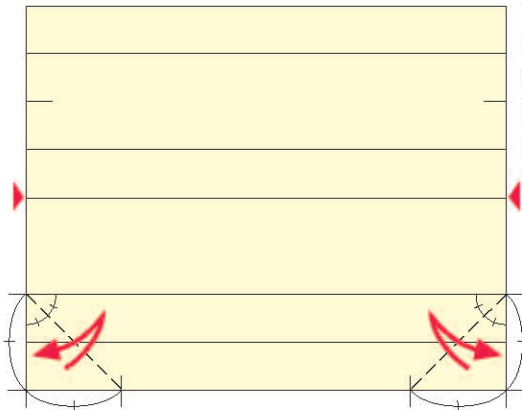
In this way there should be formed the top plank and the bottom plank, which also optionally might have a piece of line inserted into it as shown.

Small Side Plank

Working with the pre-folded rectangle, place it as shown.

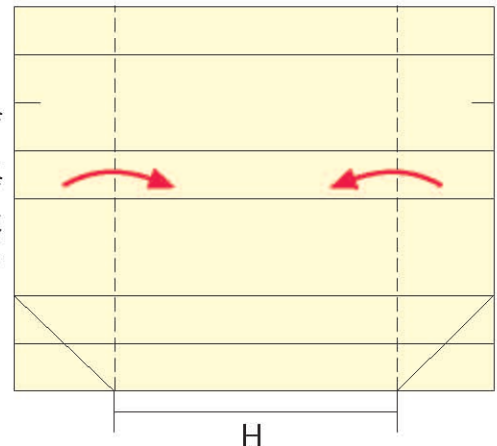
7

Now we are determining the height (H) of the future frame. In this case, as we do a square frame, we'll do the height (H) equal to the width (W).



The following marking-off is for the small frame. When using sheets of Letter format, the height will be 6-3/4 inches (17.5 cm).

Make the diagonal fold-marks over the two lower horizontal sections at sides, as shown.

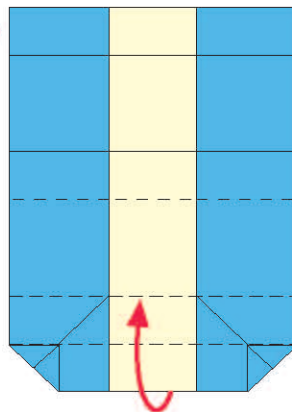


8

Valley fold the right- and left-hand sides being guided by the intersections of fold-marks and the bottom edge as shown.

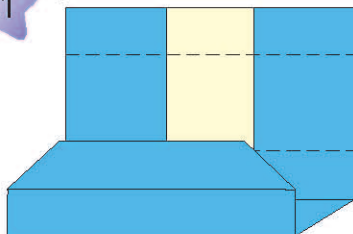
Fold the bottom flaps into the position shown in the next step.

10

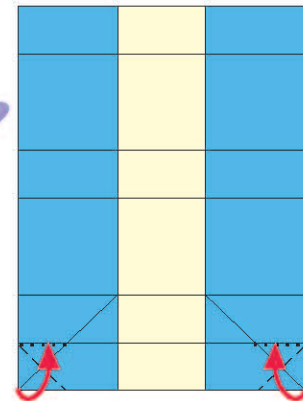


The side plank is ready for the assembling. Make another one, so that you have 2 side planks.

11



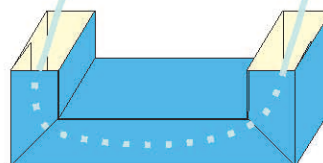
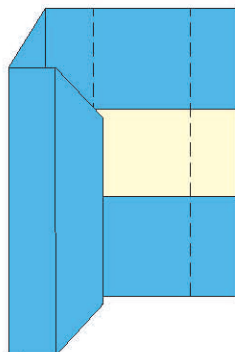
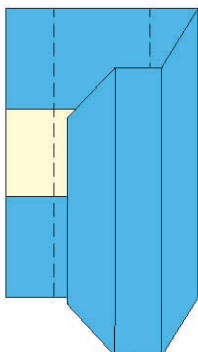
9

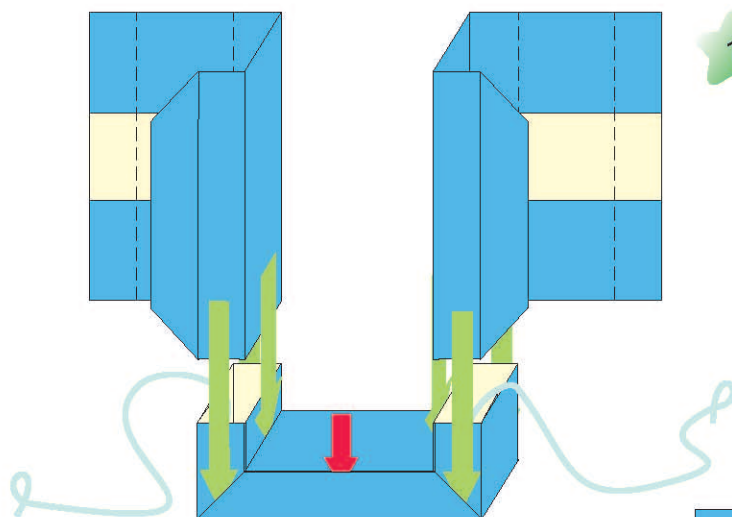


Fold the side corners at the bottom as shown. Keep a little gap (a couple mms) between the folded edge and the horizontal fold-line, because it will facilitate the further assembly of the side plank.

Small Square Frame Assembly

Get ready the top plank, the bottom plank (optionally with the line threaded through it) and 2 side planks.





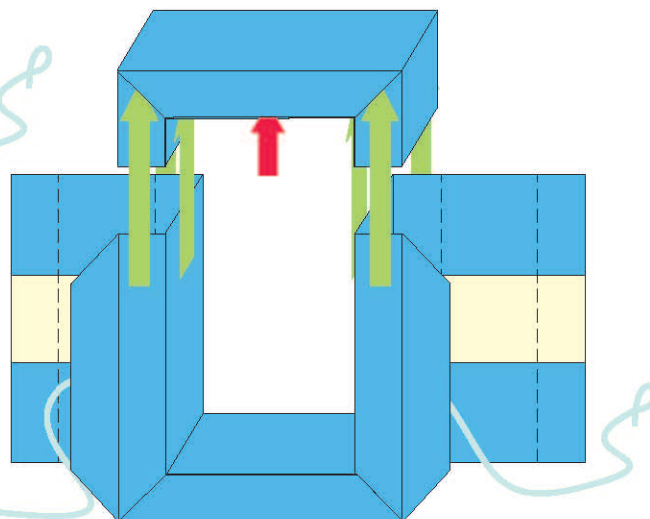
1

Place the bottom plank by the back side, where there is a slit. Keep the line ends aside as shown.

Consistently insert each side plank, sliding it down between the layers of the bottom plank as shown.

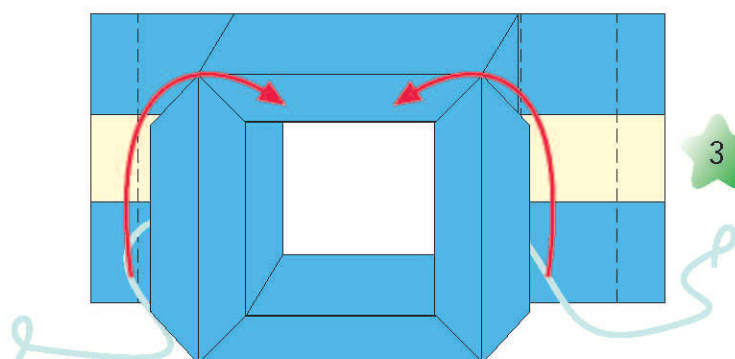
2

This should be the result. Now take the top plank by its back side with the slit and place it atop the side planks. Step-by-step, insert each side plank, sliding it between the layers of the top plank as shown.



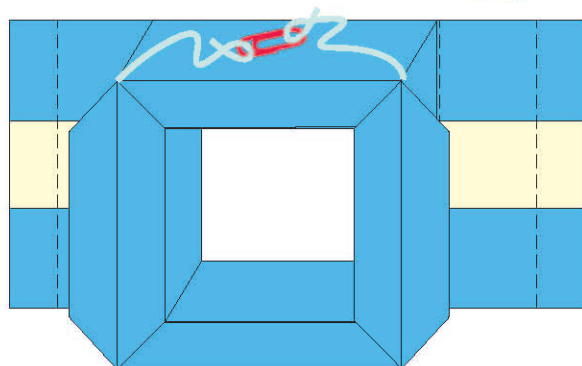
3

This should be the result. Bring the ends of line/thread atop of the frame and connect the ends, for instance, with a paper clip.



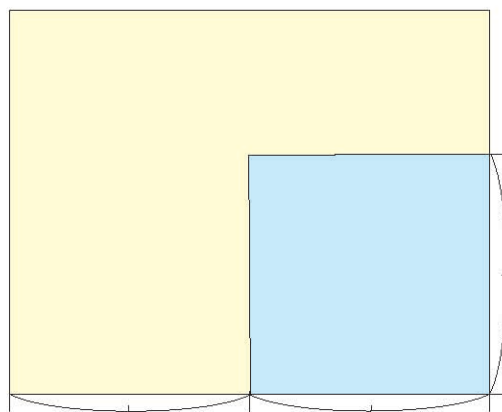
This should be the result.

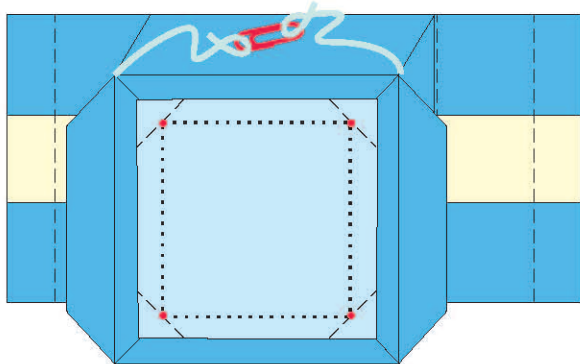
4



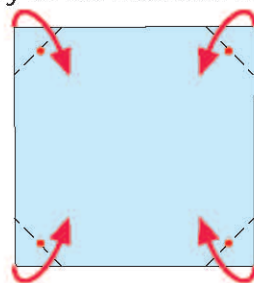
5

Now we need to prepare a piece of paper for the background. For this particular square frame, cut out a square, which side is a half of the rectangle used for the plank, as shown.





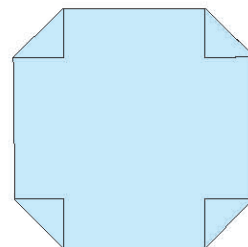
Fold the corners over the marked dots as shown. Now the background paper is ready to be inserted into the frame.



7

This should be the result.

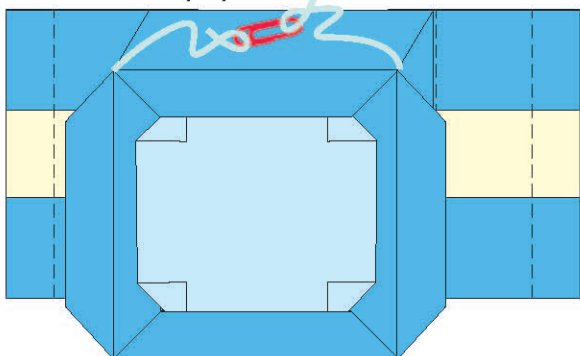
8



Place it on the frame, aligning their centers, and mark the intersection points as shown. You may direct the whole construction against light to see the intersections and make the marks, or just find the intersections tactilely with your fingertips.

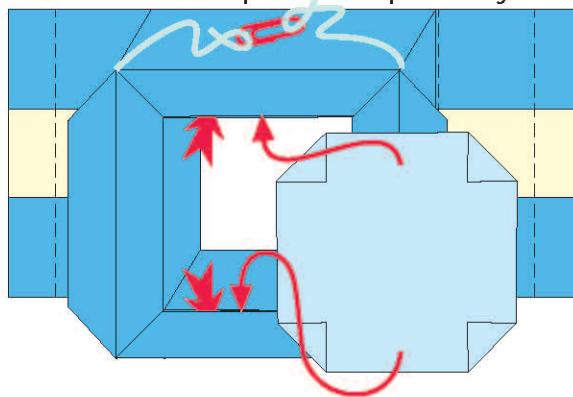
10

This should be the result. Adjust the background paper, so that it's centered.

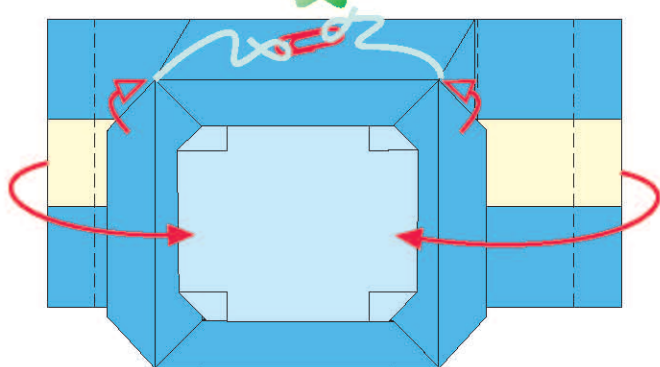


9

Insert the top and bottom edges of the background paper into slits of the top and bottom planks respectively.

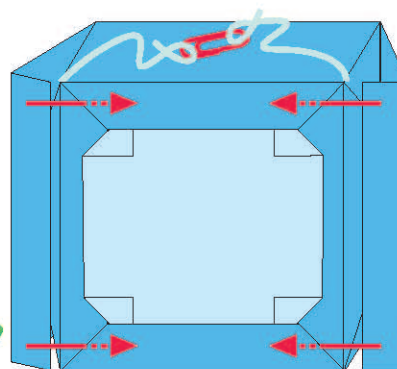


11



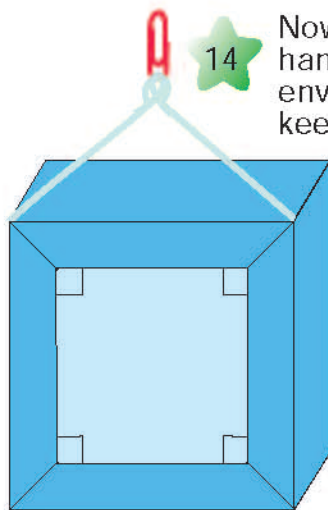
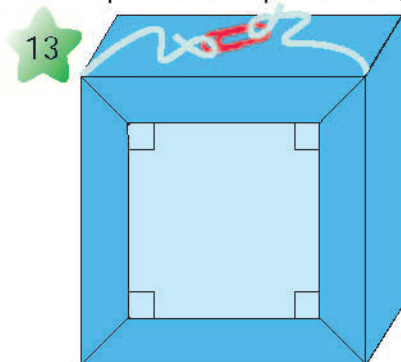
Now fold the small side flaps to touch the side walls and bring the big flaps of the side planks around and toward you, covering the small flaps.

12

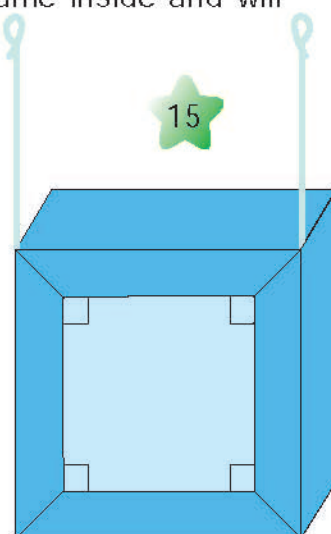


This should be the result. Now gently insert the side flaps into the pockets as shown and move them inside as far as they will go. Note that the flaps have to be atop and covering the background paper.

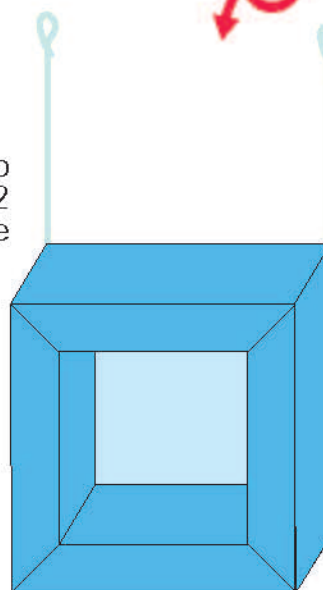
This should be the result. When you need to change the background paper, just open the side flaps slightly pushing the inner edges out of pockets. Change the paper and insert the side flaps into the pockets again.



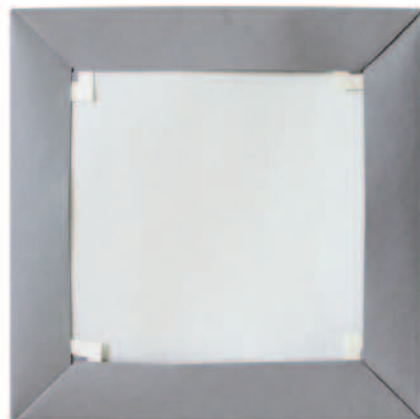
Now the frame is ready and you can hang it using the in-built line, which envelopes the frame inside and will keep it securely.



Here is the completed Deep Shadowbox Frame (with 1:2 rectangle profile) of the square shape and the small type.

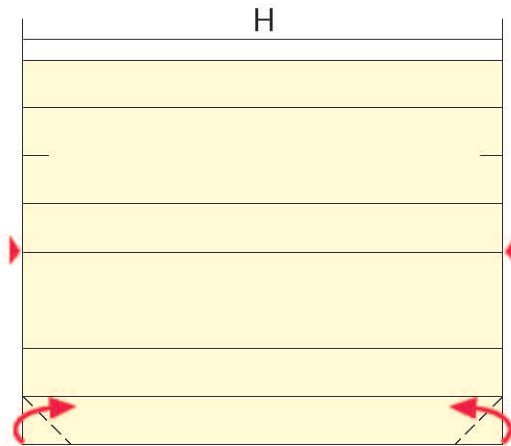


*Small Square Frame
with Mini-Oribana
'Inspiration'*



Tall Side Plank

When making a tall rectangular frame, you may use all the length of the initial rectangle to get the tall side planks.



Working with the pre-folded rectangle, place it as shown.

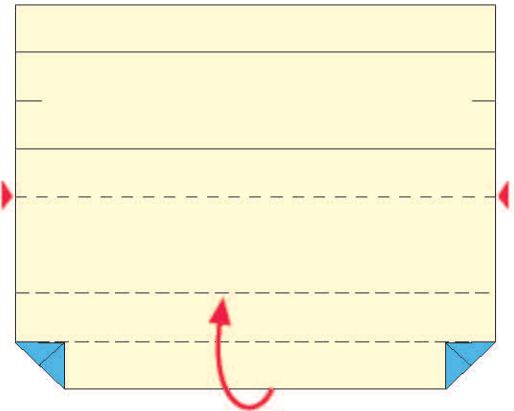
Now we are determining the height (H) of the future frame. In this case as we do a side plank for a tall frame, we'll use the entire height of the initial rectangle.

7

Working with the lowest horizontal section, fold the side corners as shown. Keep a little gap (a couple mms) between the folded edge and the horizontal fold-line, because it will facilitate the further assembly of the side plank.

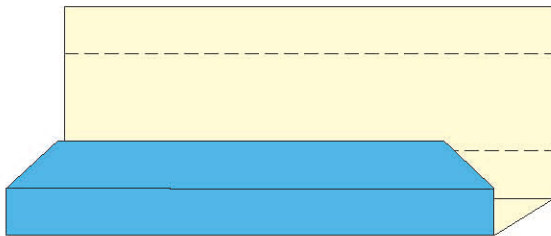
8

This should be the result. Fold the bottom flaps into the position shown in the next step.



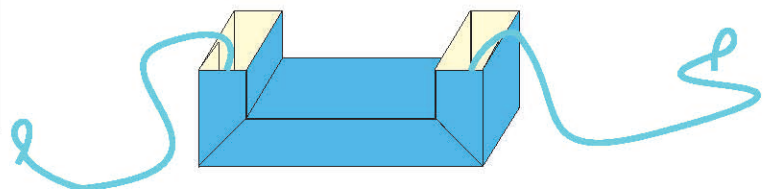
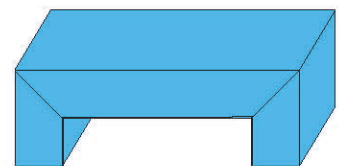
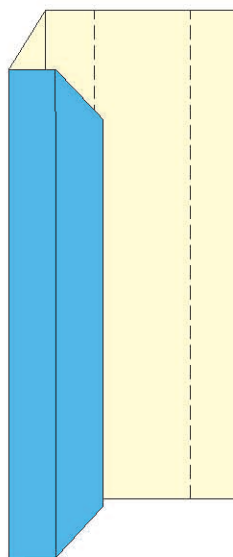
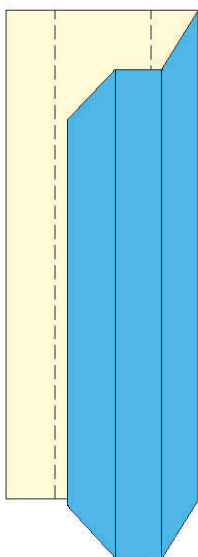
9

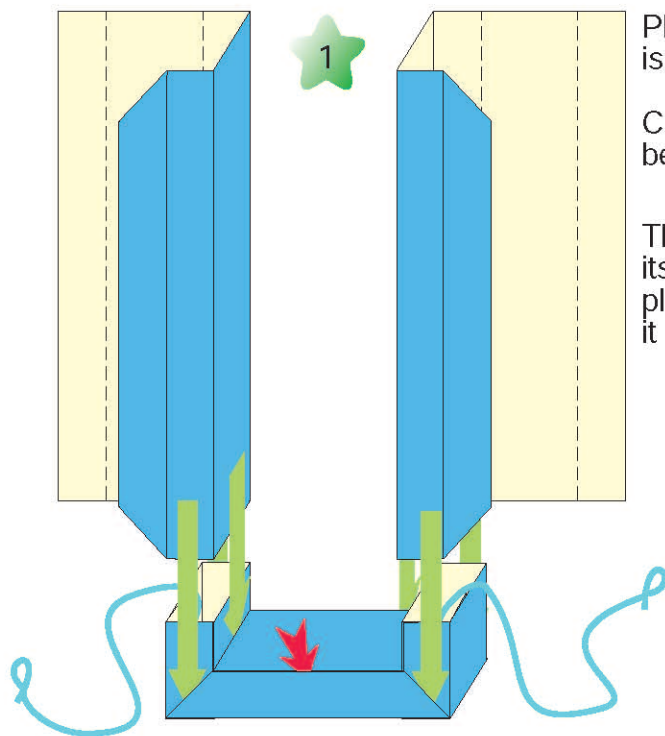
The tall side plank is ready for the assembling. Make another one, so that you have 2 tall side planks.



Tall Rectangular Frame Assembly

Get ready the top plank, the bottom plank (optionally with the line threaded through it) and 2 tall side planks.

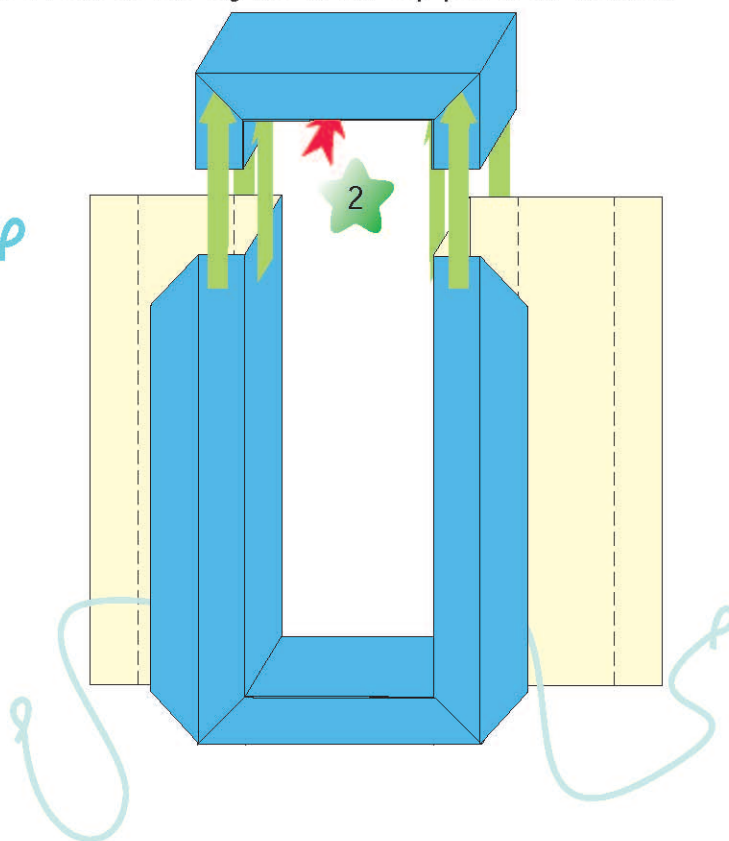




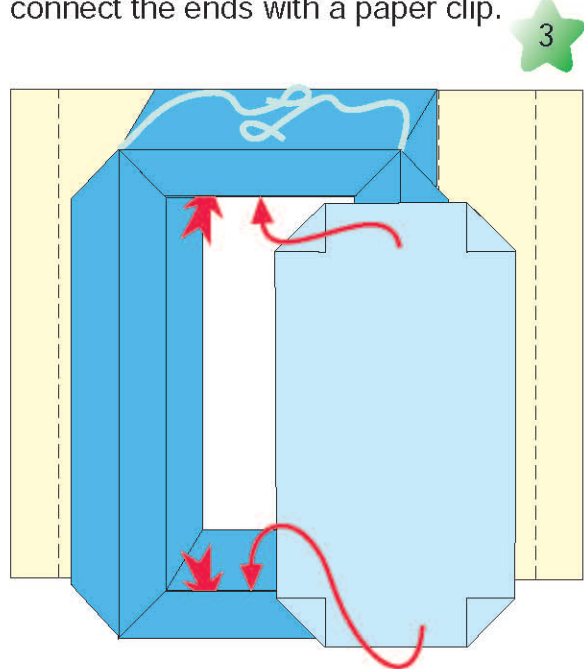
Place the bottom plank by the back side, where there is a slit. Keep the line ends aside as shown.

Consistently insert each side plank, sliding it down between the layers of the bottom plank as shown.

This should be the result. Now take the top plank by its back side with the slit and place it atop the side planks. Step-by-step, insert each side plank, sliding it between the layers of the top plank as shown.



This should be the result. Bring the ends of line/thread atop of the frame, you may connect the ends with a paper clip.

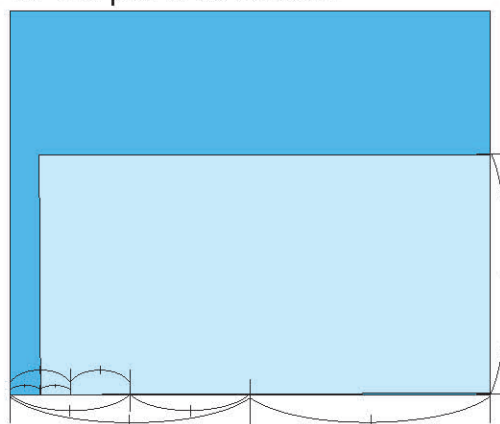


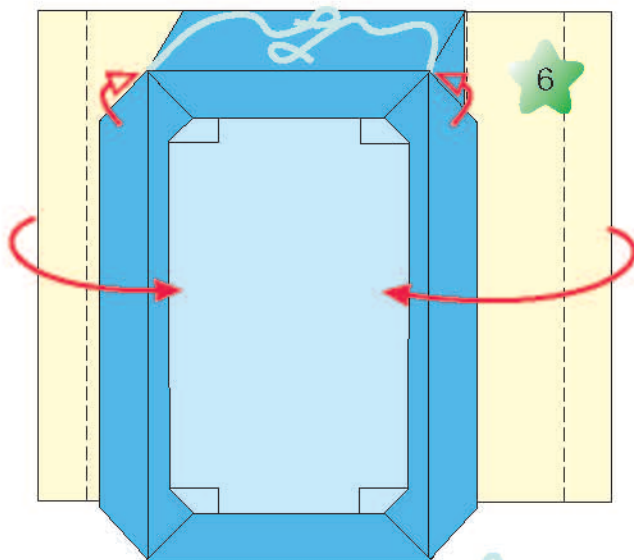
Now we need to prepare a piece of paper for the background. For this particular tall frame (with the small width), cut out the background rectangle out of the rectangle used for the plank as shown.



Fold the corners of the background in the same ways we did for the square frame assembly.

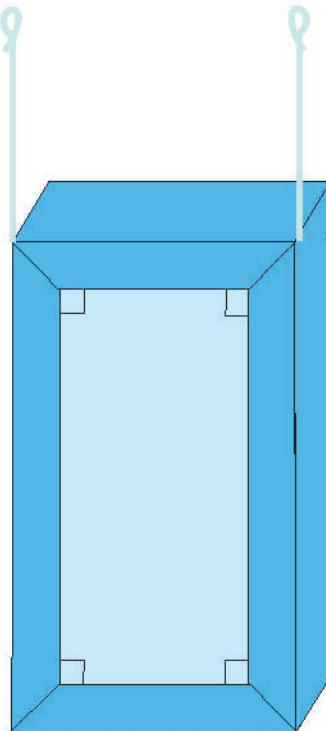
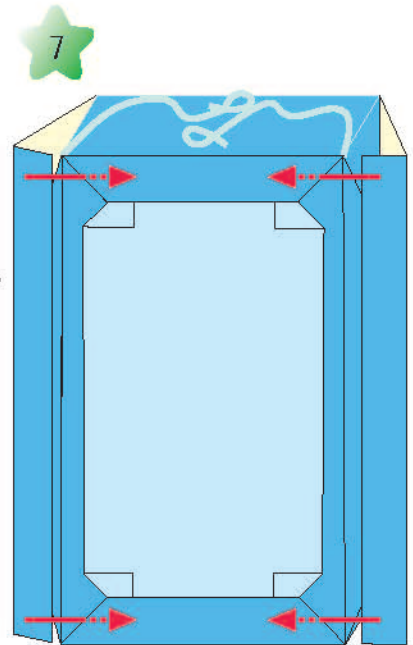
Insert the top and bottom edges of the background paper into slits of the top and bottom planks respectively.



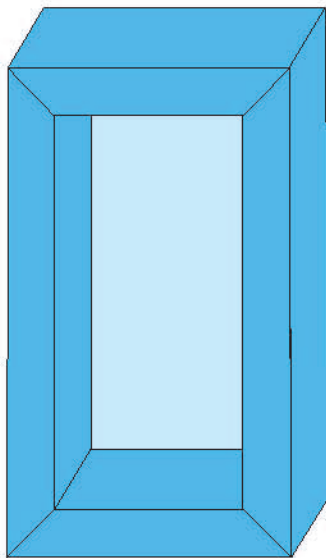


This should be the result. Adjust the background paper, so that it's centered. Now fold the small side flaps to touch the side walls and bring the big flaps of the side planks around and toward you, covering the small flaps.

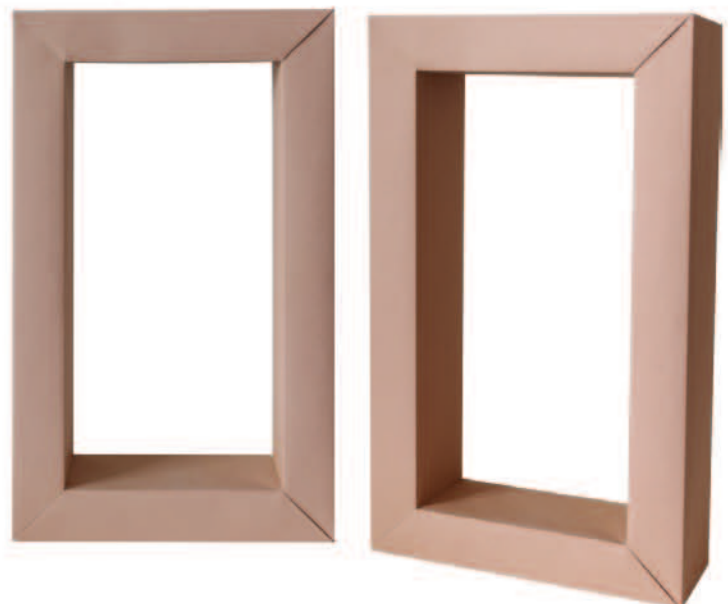
Now gently insert the side flaps into the pockets as shown and move them inside as far as they will go. Note that the flaps have to be atop and covering the background paper.



This should be the result. Now the frame is ready and you can hang it using the in-built line, which envelopes the frame inside and will keep it securely.



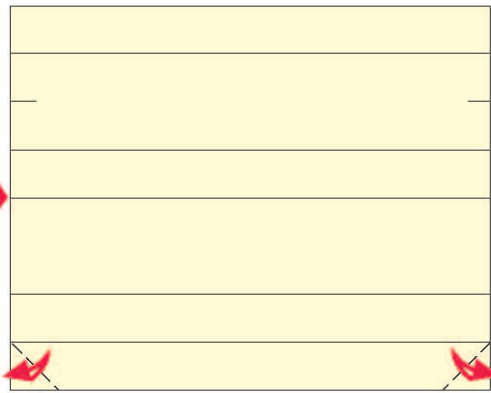
Here is the completed Deep Shadowbox Frame (with 1:2 rectangle profile) of the rectangular shape with the small width and the tall height.



Middle Side Plank

If you are making a middle rectangular frame, there is the following marking-off for the initial rectangle to get the middle side planks.

Working with the pre-folded rectangle, place it as shown.



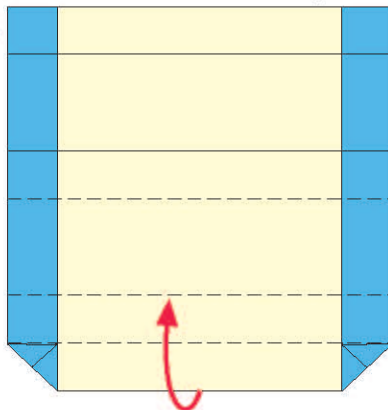
Now we are determining the height (H) of the future frame. In this case we do a side plank for a middle frame. When using sheets of Letter format, the height will be 7-3/4 inches (20 cm).

7

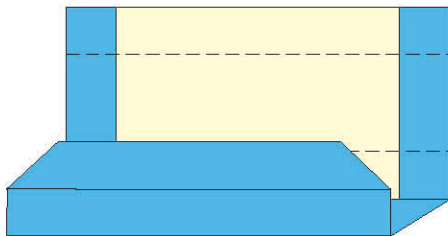
Make the diagonal fold-marks over the lower horizontal section at sides, as shown.

This should be the result. Fold the bottom flaps into the position shown in the next step.

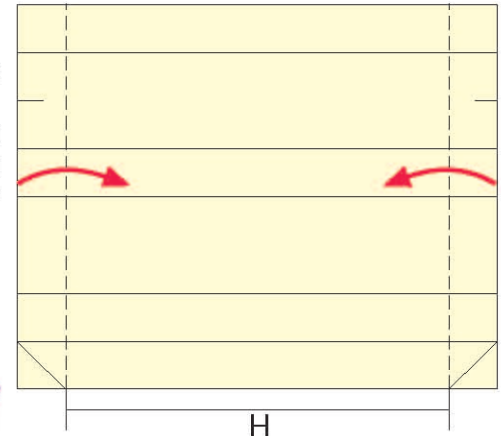
10



11



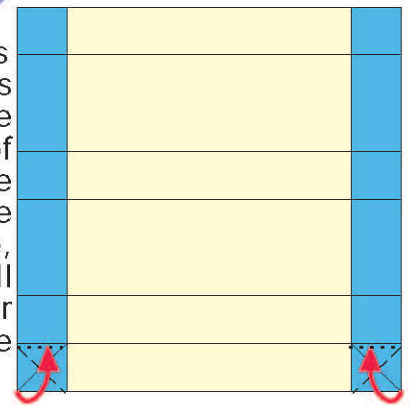
The middle side plank is ready for the assembling. Make another one, so that you have 2 side planks.



8

Valley fold the right- and left-hand sides being guided by the intersections of fold-marks and the bottom edge as shown. Now the resulted distance in the middle (H) will be the height of the future frame.

9



Fold the side corners at the bottom as shown. Keep a little gap (a couple of mms) between the folded edge and the horizontal fold-line, because it will facilitate the further assembly of the side plank.

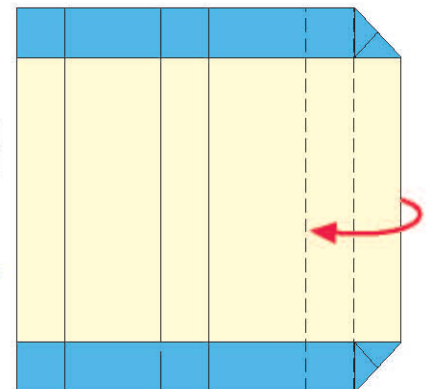
Middle Side Plank Closed

There is a possibility to close the side plank before the assembly. Using the closed side planks will make inserting the background paper a bit difficult though. If you do not plan to use the background paper, the closed planks works just fine in the assembly.

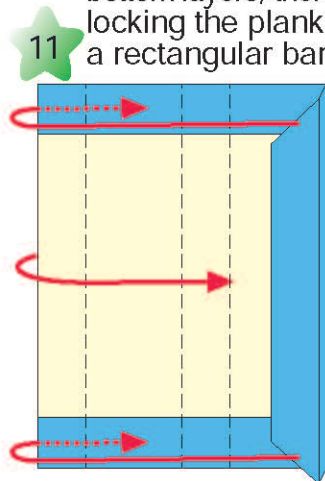
Fold the pre-folded rectangle as shown in steps 8 and 9 above. Then turn the paper around into the shown position.

10

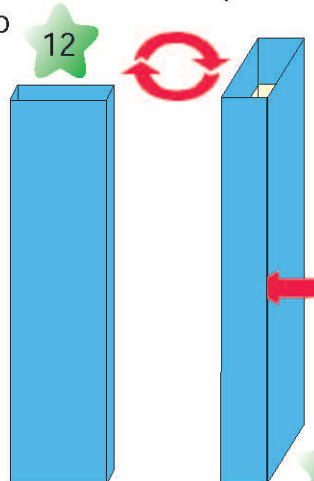
Working from the right-hand side, fold the two side flaps into the position shown in the next step.



Bring the flaps of the left-hand side to the right and insert the two right-hand flaps under the top and bottom layers, thereby locking the plank into a rectangular bar.

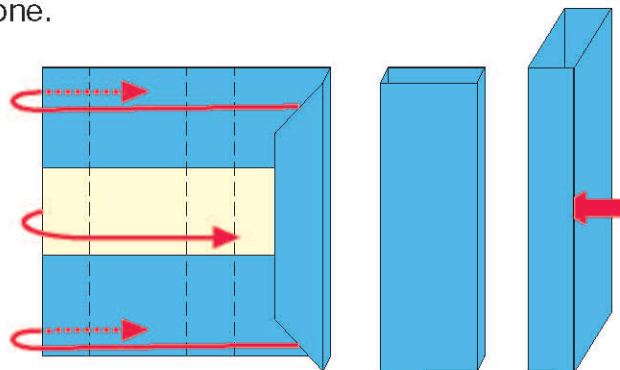


Turn the plank toward you by the plane with the slit; it will be the back side of the plank.



Small Side Plank Closed

If you'd like to have the small side planks closed, do it in the same way as the middle one.

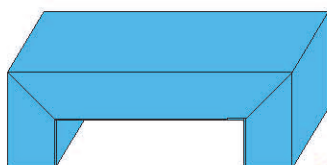


The middle side plank is closed and ready for the assembling. Make another one, so that you have 2 side planks.

13

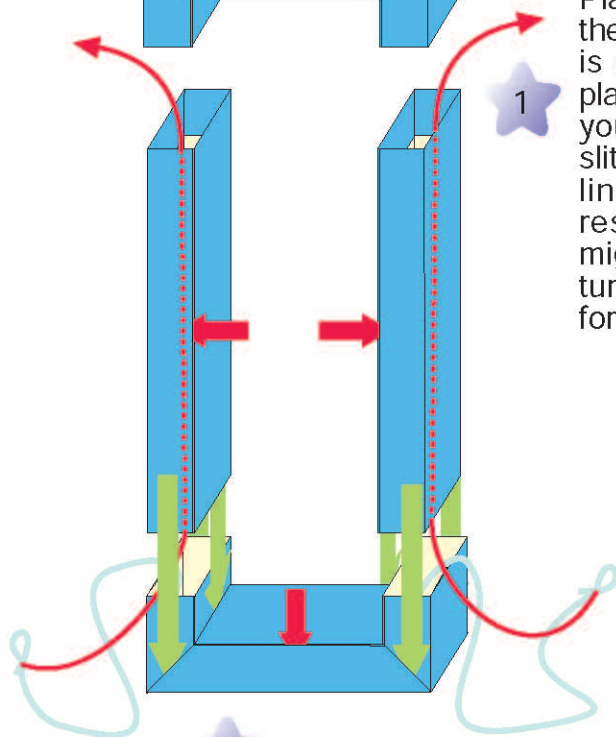
Middle Rectangular Frame Assembly (With Closed Side Planks)

Get ready the bottom plank (with the line threaded through it), the top plank and 2 side planks, closed, of course.



Place the bottom plank by the back side, where there is a slit. Prepare the side planks, turning them toward you by their back side with slits as shown. Thread the line ends through the respective side planks (it might be easier to do, if you turn the construction over for this).

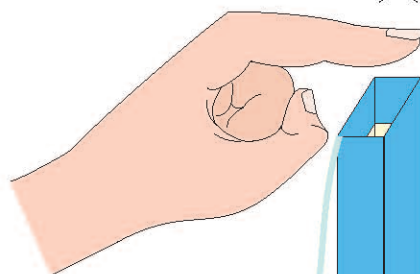
1



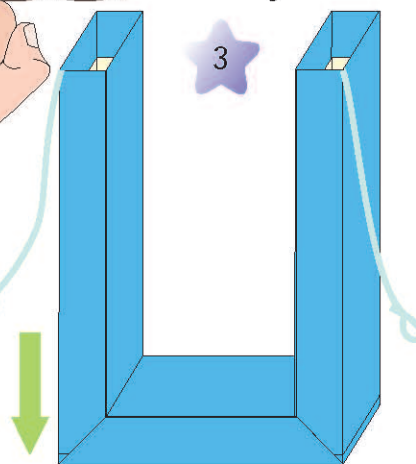
2

Consistently insert each side plank, sliding it down between the layers of the bottom plank as shown.

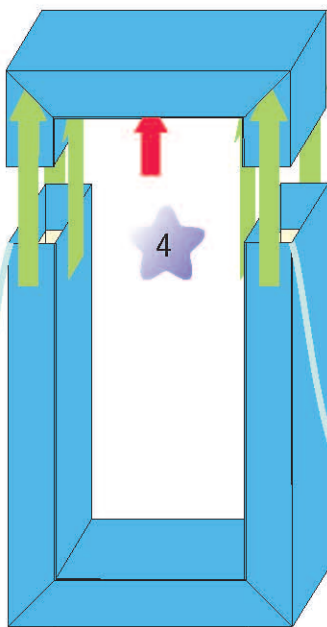
Gently tap on the top of each side plank to get it into the bottom plank all the way.



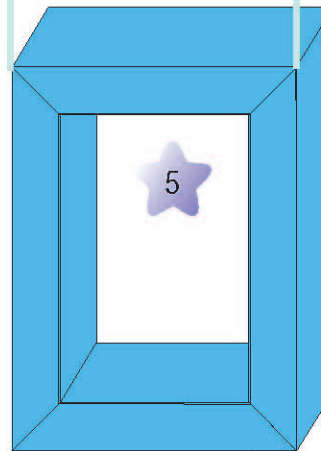
3



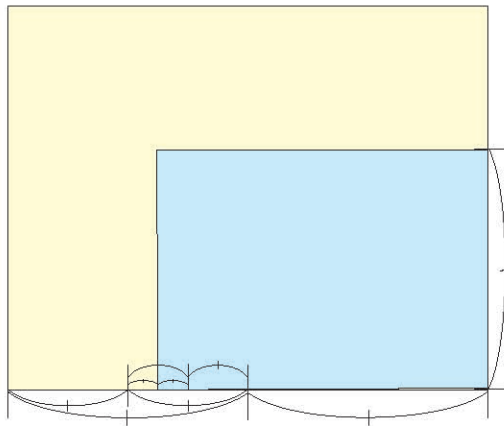
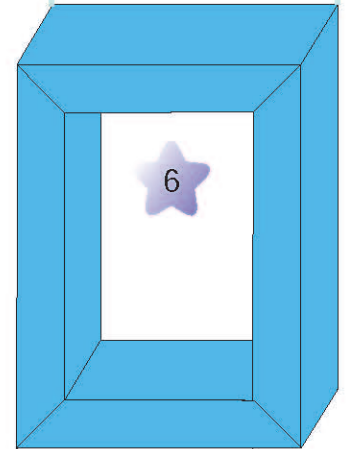
This should be the result. If you do not use the background paper then, take the top plank by its back side with the slit and place it atop the side planks. Step-by-step, insert each side plank, sliding it between the layers of the top plank as shown.



Now the frame is ready! Turn it over.

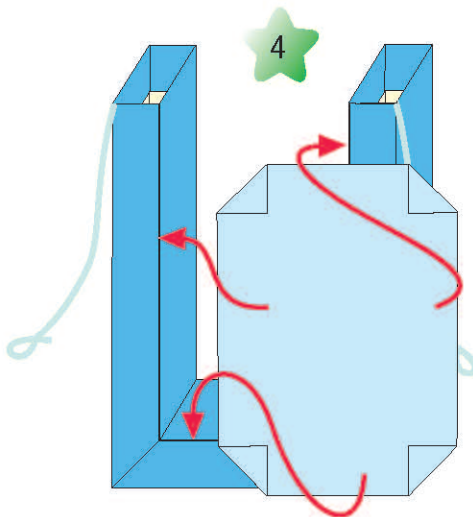


Here is the Deep Shadowbox Frame (with 1:2 rectangle profile) of the rectangular shape with the small width and the middle height.

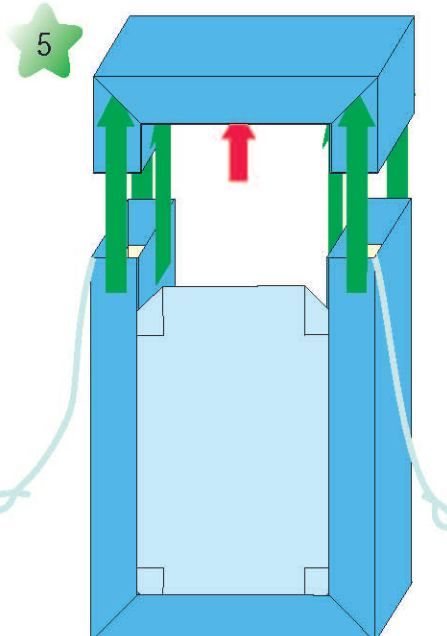


To prepare a piece of paper for the background for this particular frame with the small width and the middle height, cut out the background rectangle as shown using the rectangle of the same size that was used for the plank. Then fold the corners of the background in the same ways how we did for the square frame assembly.

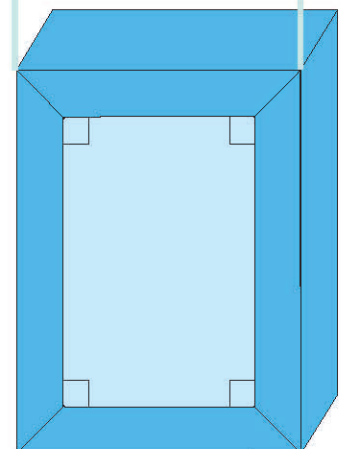
Now take the top plank by its back side with the slit and place it atop the side planks. Step-by-step, insert each side plank, sliding it between the layers of the top plank as shown. At the same time, direct the top edge of the background paper into the slit of the top plank.



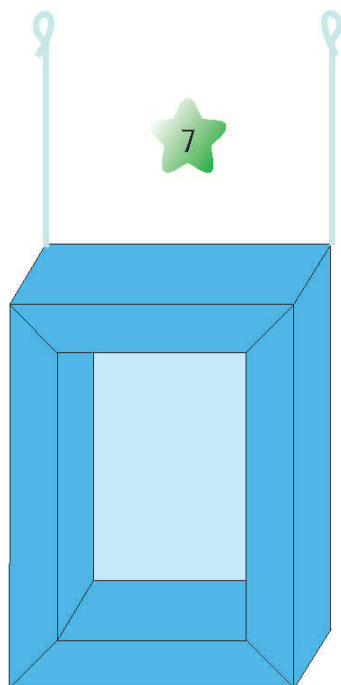
Insert the bottom and side edges of the background paper into slits of the bottom and side planks respectively.



This should be the result. Turn it over.



7



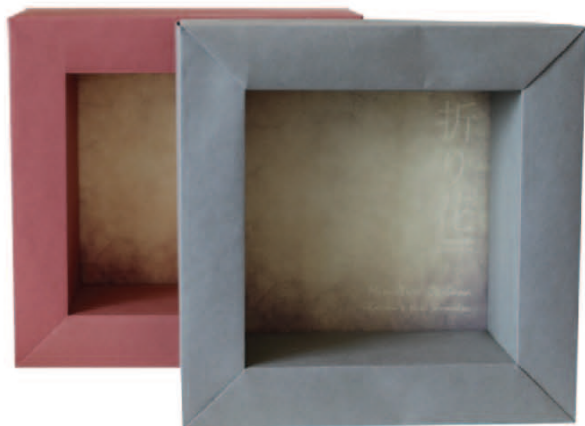
Now the frame is ready and you can hang it using the in-built line, which envelopes the frame inside and will keep it securely.

Here is the completed Deep Shadowbox Frame (with 1:2 rectangle profile) of the rectangular shape with the small width and the middle height.

Congratulations!

Now you may fold the various shapes and sizes of the Deep Shadowbox Frame (with 1:2 rectangle profile).

Enjoy!





Deep Shadowbox Frame (1:2 Rectangle Profile, 2 Modules)

by Yuri Shumakov

This is an elegant design of a classic looking square deep shadowbox frame with the 1x2 rectangle profile that folds from 2 modules. It uses the same principle of folding as the 4-module Deep Shadowbox Frame. This frame is good for displaying little origami models or pictures. You will need 2 identical rectangles and 1 piece of paper for the background.

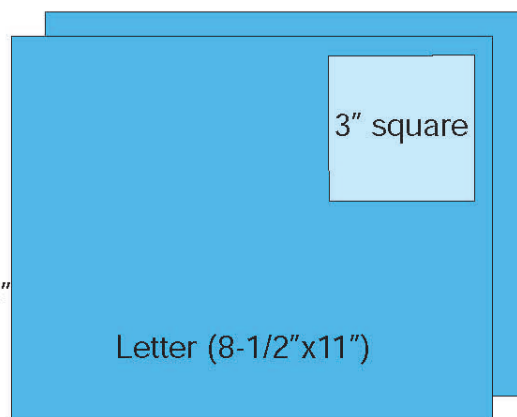
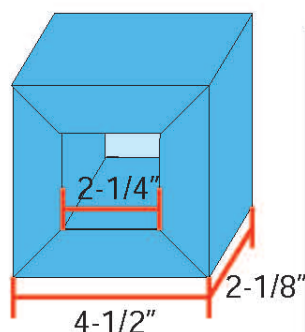
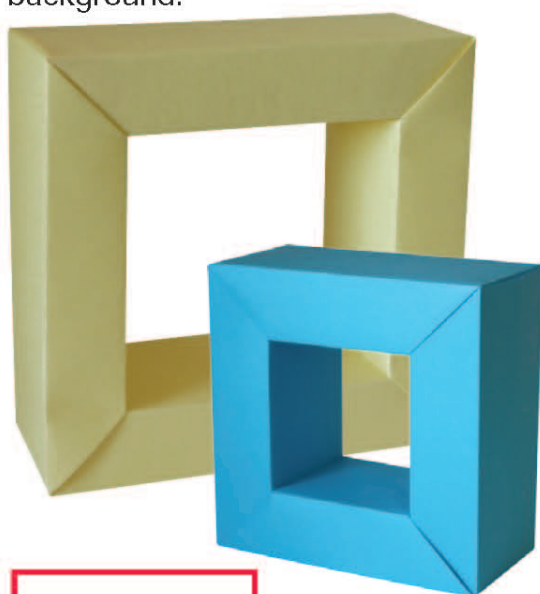
Suggested sizes: Use rectangles somewhat from 3:4 proportion and longer depending on the size you'd like your frame to be. You may use regular sheets of A4 (30x21 cm), Letter (11x8.5 inches) or Legal (14x8.5 inches) format. A square for the background should be a bit bigger than the picture size of the resulted frame.

For instance, using sheets of Letter format (8-1/2 x 11 inches) will result in a rather tubby square frame, which side is 4-1/2-inches; depth - about 2-1/8 inches; picture side - about 2-1/4 inches. Use a 3-inch square or so for the background.

When using sheets of Legal format (8-1/2 x 14 inches) will result in a square frame, which side is 6 inches; depth - about 2-1/8 inches; picture side - about 3-3/4 inches. Use approximately a 5-inch square for the background.



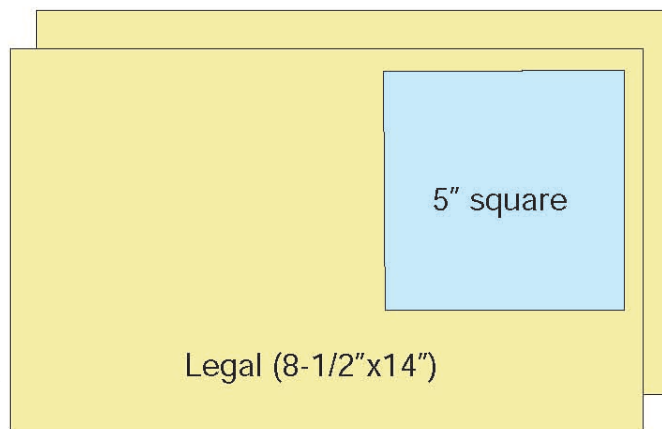
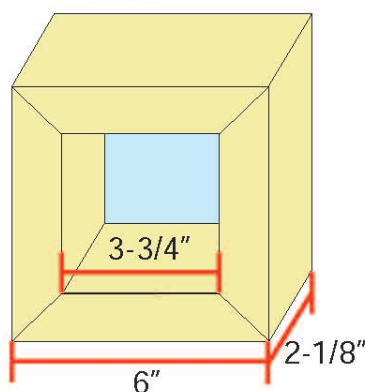
*Square Frame
with Kitten*



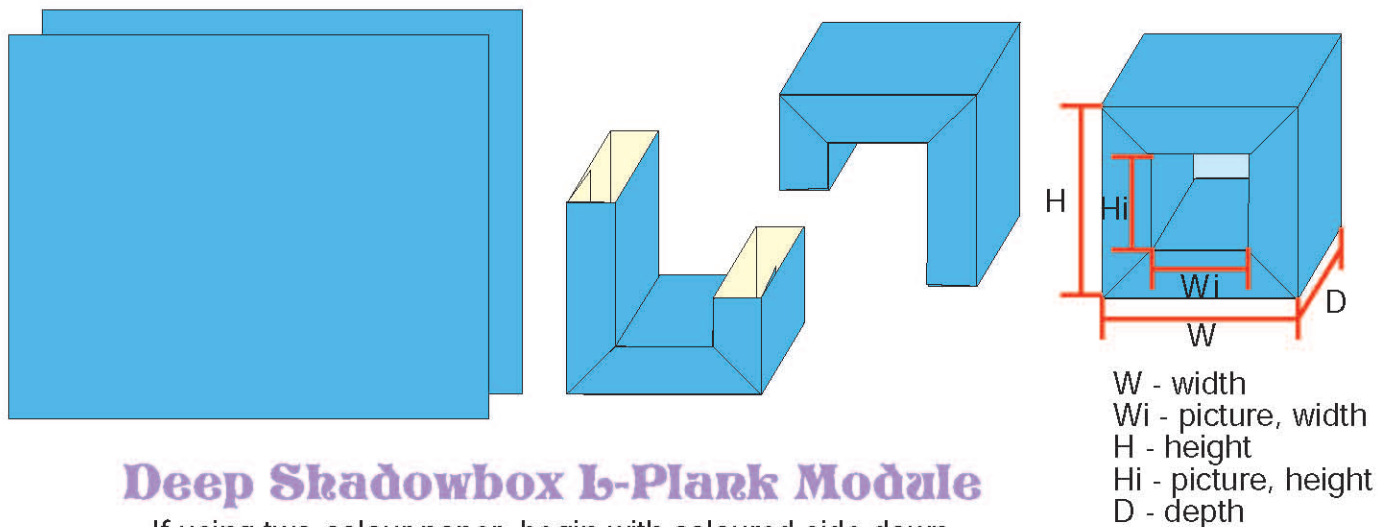
Suggested colours: It can be any colour you wish. It's good to use a lighter shade for the background, when the frame is meant for displaying little objects.

1:2 Rectangle
Profile

Suggested paper: Paper should be strong and relatively thick. Copy paper works quite well. You may use various craft paper also.



This shadowbox frame consists of two identical L-plank modules, each folded from a rectangle.

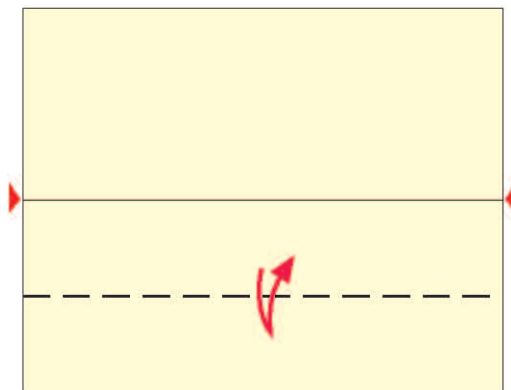
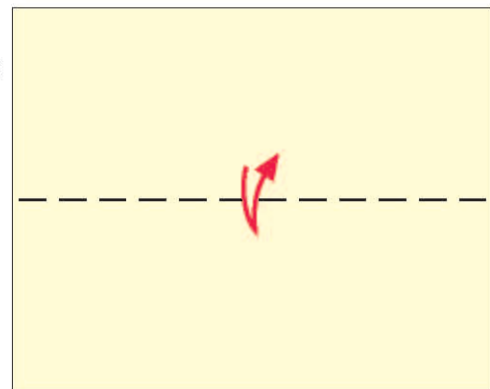


Deep Shadowbox L-Plank Module

If using two-colour paper, begin with coloured side down.

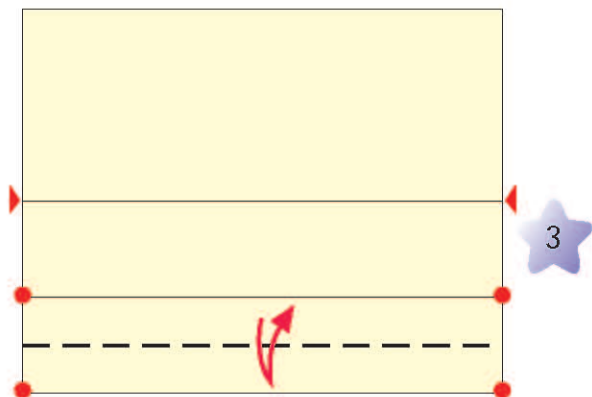
Place your rectangle longwise, coloured side down, as shown. Valley fold it in half from bottom to top. Press the fold flat and unfold it.

1



2

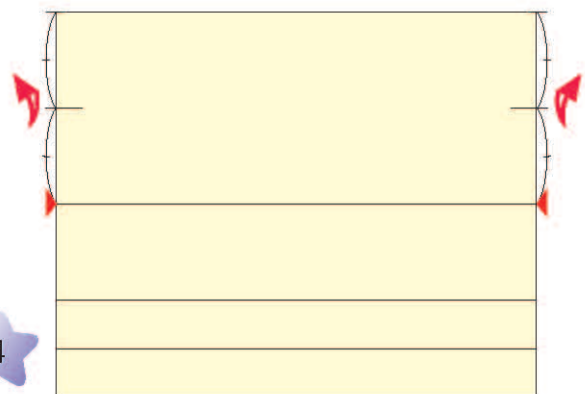
Valley fold the bottom edge to the horizontal middle fold-line. Press it flat and unfold it.



3

Now valley fold the bottom edge to the fold-line made in the previous step, so that the marked dots coincide. Press it flat and unfold it.

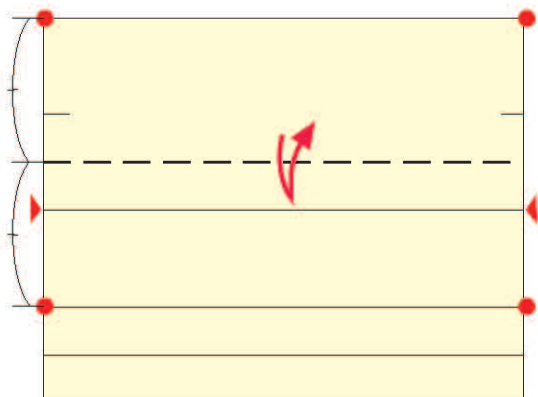
4



Working with the top half, make the tiny fold-marks on the sides as shown. Note, be careful to not make long fold-lines. If you use a very stiff paper then you may just do the marks with a pencil and a ruler.

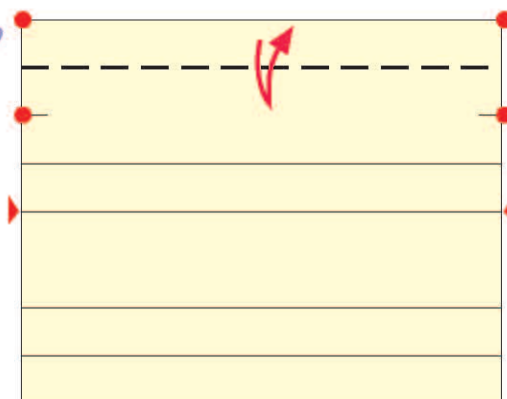
5

Valley fold the top edge down to meet the fold-line made in step 2, so that the marked dots coincide. Press it flat and unfold it.



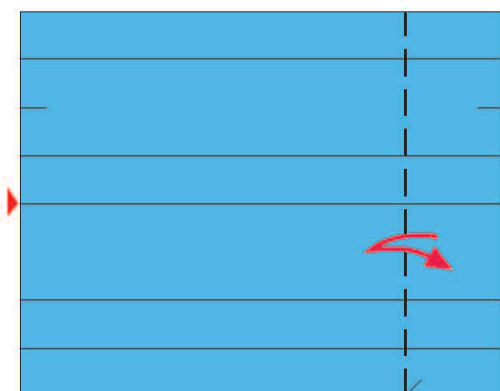
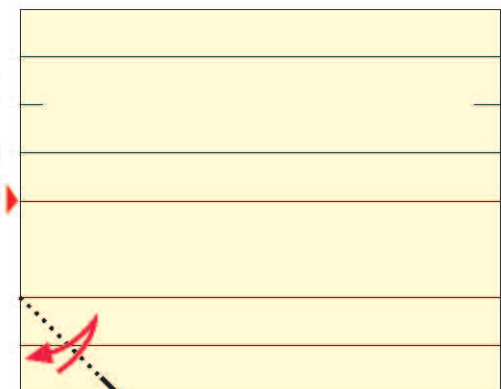
6

Valley fold the top edge down to meet the fold-marks made in step 4, so that the marked dots coincide. Press it flat and unfold it.



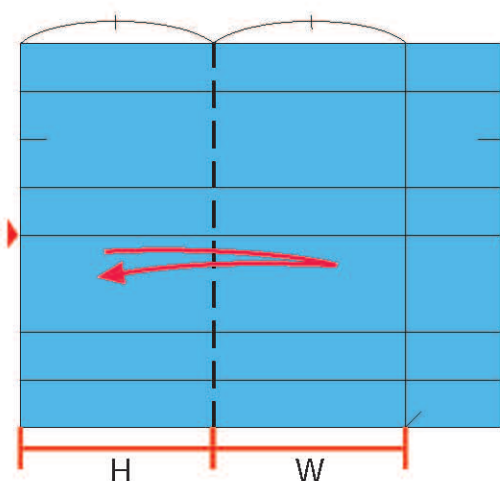
7

This should be the result. At left-hand side, make the diagonal fold-mark over the two lower horizontal sections as shown. Then, turn the paper over from side to side.



8

Valley fold the right-hand side being guided by the intersection of the fold-mark and the bottom edge as shown. Press the fold flat and unfold it.

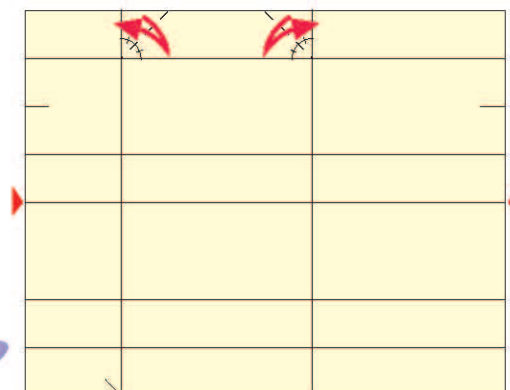


9

Valley fold the left-hand side over to the right to meet the fold-line made in the previous step. Then, turn the paper over from side to side.

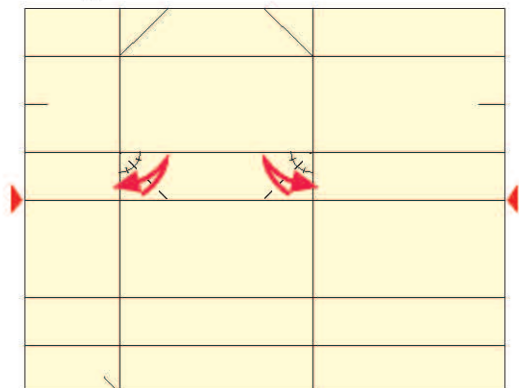
Working with the top horizontal section at the middle vertical section, make the limited diagonal fold-lines by valley folding as shown.

10



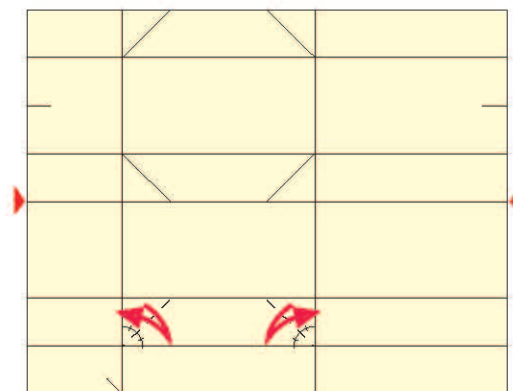
11

Working with the narrow horizontal section at the middle, by valley folding make the limited diagonal fold-lines as shown.



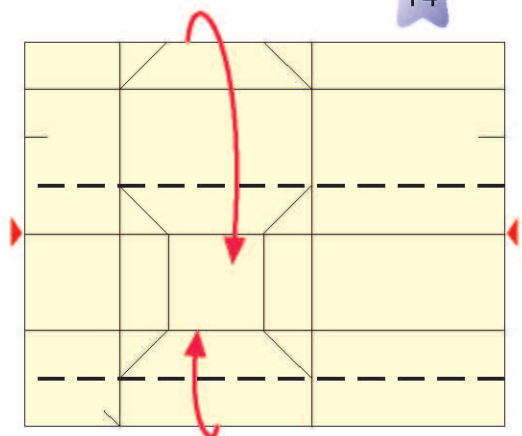
12

Working with the second from the bottom narrow horizontal section, by valley folding, make the limited diagonal fold-lines as shown.



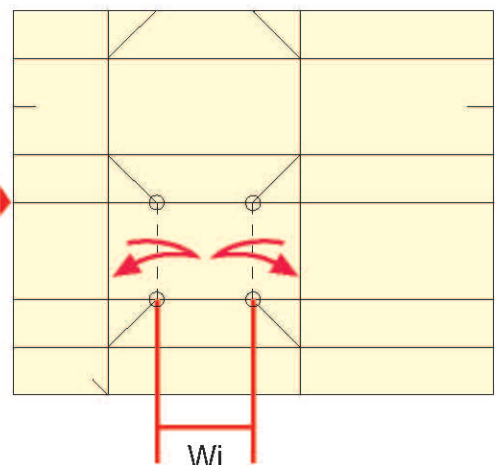
Valley fold one narrow horizontal section at the bottom and two horizontal sections on the top as shown.

14



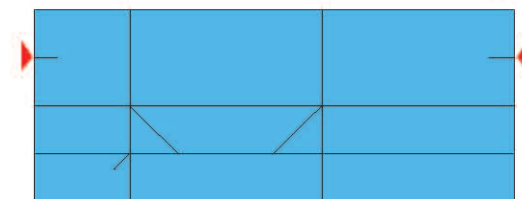
By valley folding, make the limited fold-lines between the intersections marked by the circles as shown. This will be the picture width (W_i) of the future frame.

13



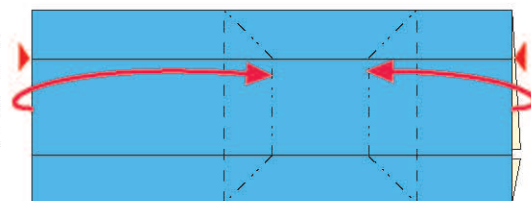
This should be the result. Turn the paper over from side to side.

15

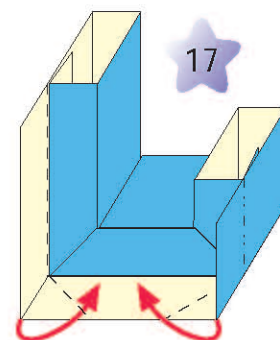


Separating the front layer from the back layers at sides, shape the paper along the existing fold-lines into the position shown in the next step.

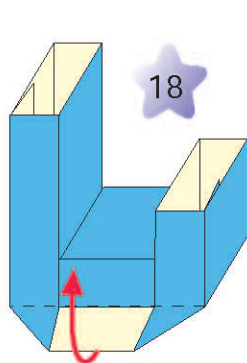
16



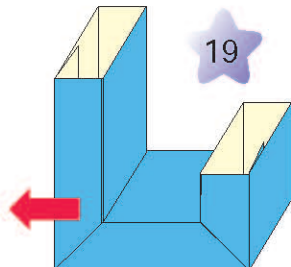
17



This should be the result. Along the existing fold-lines, close the side flaps as shown.

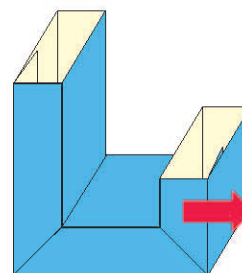
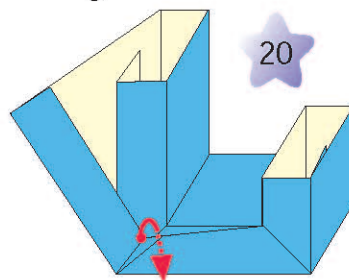


Now close the resulted bottom flap up.

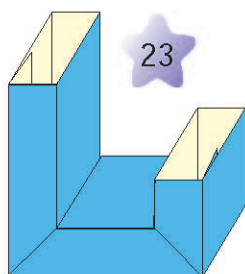


Pull out the left-hand side flap in order to prepare it for locking.

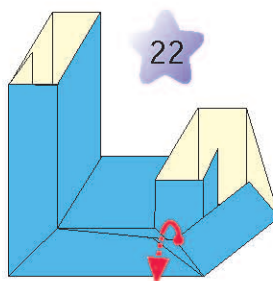
Working with the left-hand side flap, direct the "valley" fold into the pocket between the layers. Continue inserting the "corner" into the "pocket", thereby locking the side flap. The flat bone folder or something similar can be helpful.



This should be the result. Pull out the right-hand side flap in order to prepare it for locking.



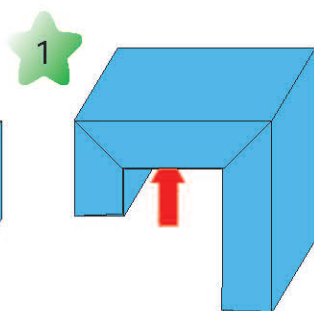
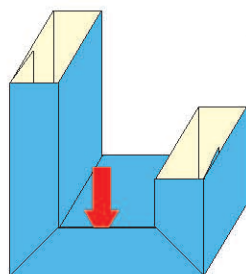
This should be the result. Here is the completed L-plank module for the 2-module Deep Shadowbox Frame! Now make the second module in the same way.



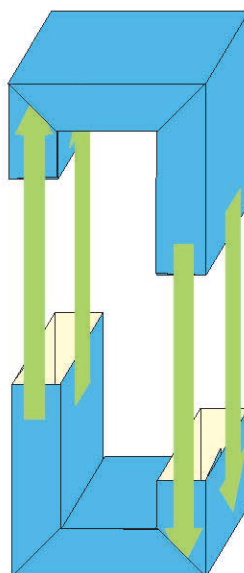
Working with the right-hand side flap, direct the "valley" fold into the pocket between the layers. Continue inserting the "corner" into the "pocket", thereby locking the side flap.

2-Module Deep Shadowbox Assembly

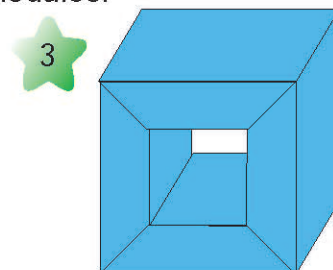
Get ready the two L-plank modules for the assembly, turning them by the back side, where there is a slit along the inner edge. This slit can be used to insert the background paper into the frame when needed.

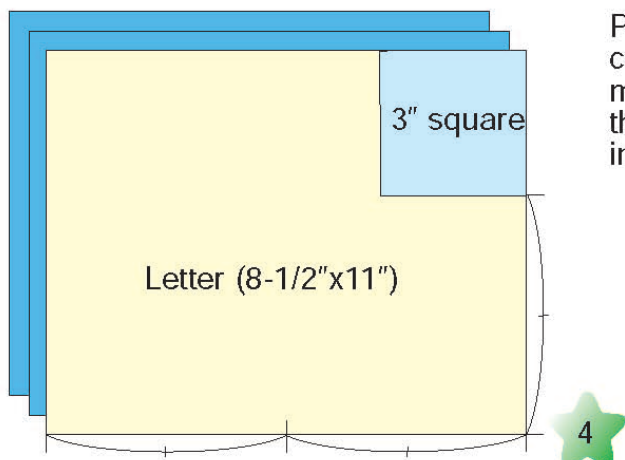


Insert the modules one into another as shown, so that the short side plank goes inside the tall side plank, sliding each tall side plank between the layers of the corresponding plank.

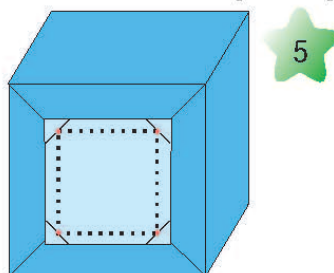


This should be the result. Here is the completed Deep Shadowbox Frame with 1:2 rectangular profile from 2 modules.

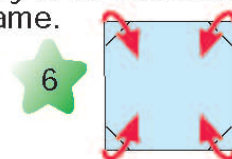




Place the background paper on the frame, aligning their centers, and mark the intersection points as shown. You may direct the whole construction against light to see the intersections and make the marks, or just find the intersections tactily with your fingertips.

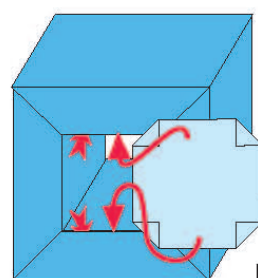
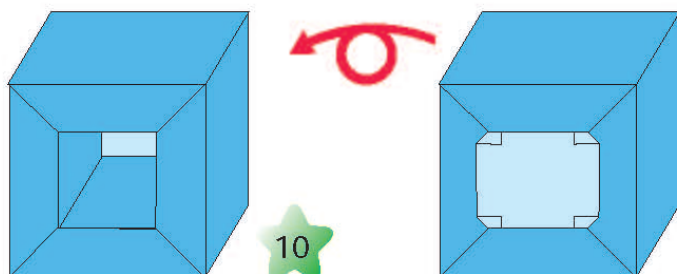


Fold the corners over the marked dots as shown. Now the background paper is ready to be inserted into the frame.

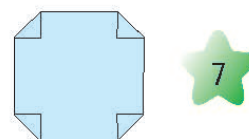


Now we need to prepare a piece of paper for the background. A square for the background should be a bit bigger than the picture size of the resulted frame. For this particular square frame, folded with sheets of Letter format (8-1/2 x 11 inches), use a 3-inch square or so for the background.

When using sheets of Legal format (8-1/2 x 14 inches, use approximately a 5-inch square for the background.



This should be the result.



Insert the top and bottom edges of the background paper into slits of the top and bottom planks respectively.

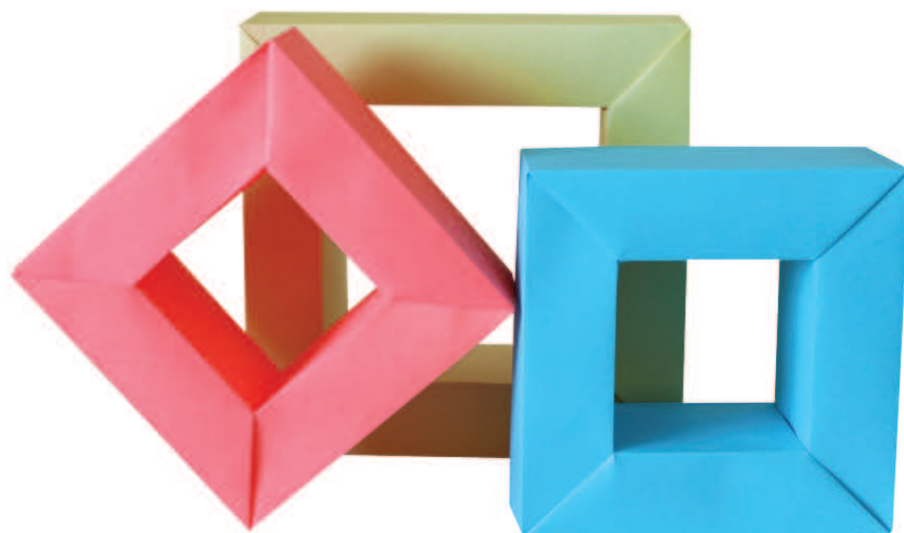


This should be the result. Adjust the background paper, so that it's centered. Then, turn the frame over.

Congratulations! Here is the completed Deep Shadowbox Frame with 1:2 rectangular profile from 2 modules with the background paper.



Square Frame with Kitten



Now you may fold the various sizes of the 2-module Deep Shadowbox Frame with 1:2 rectangle profile. This frame is perfect for displaying little origami models. Enjoy!

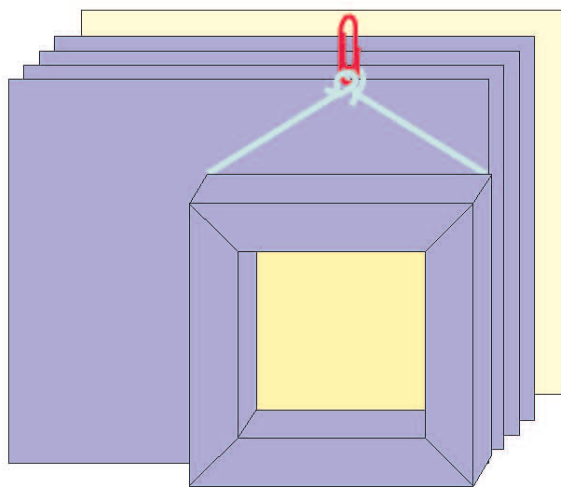


Shallow Shadowbox Frame (Square Profile, 4 Modules)

by Yuri Shumakov

This is an elegant design of a classic looking shallow shadowbox frame with the square profile. It's perfect for displaying little origami models or pictures. It can be folded into a rectangular or square frame.

You will need 4 rectangles, each for one side, and 1 piece of paper for the background. Also, optionally, for hanging (for a hanger) prepare a piece of line or thread that in length is a bit longer than the frame's perimeter. Fishing line works best for it. The line can be integrated into the frame during folding in the same manner as it's shown in the article 'Deep Shadowbox Frame (4 modules, 1:2 Rectangle Profile)'.



*Small Square Frame
with Mini-Oribana*



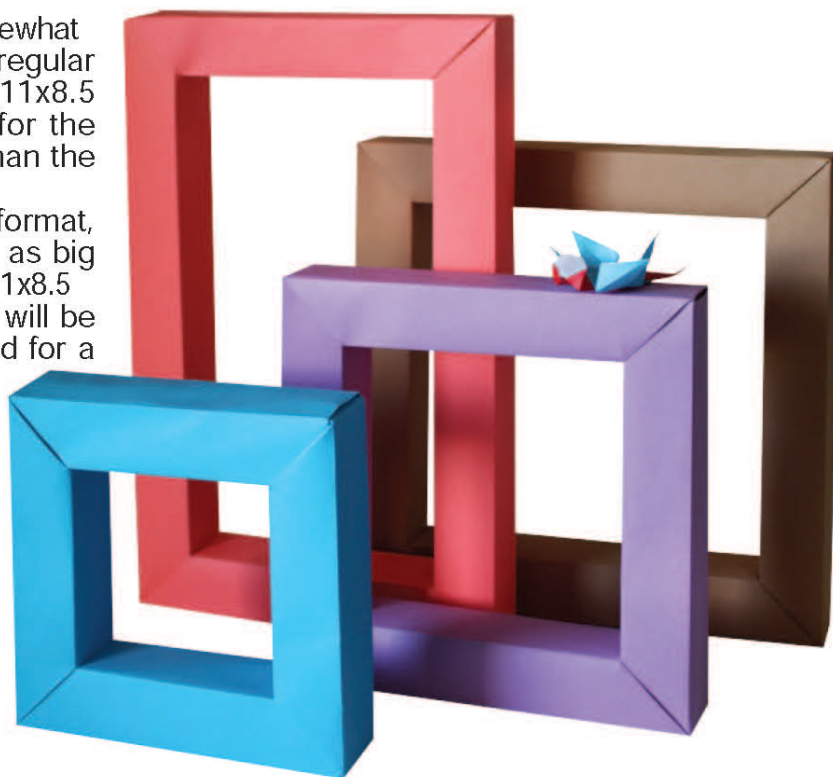
Out of the same set of rectangles, it can be folded into a rectangular or square frame of different sizes.

Suggested sizes: Use rectangles somewhat close to 3:4 proportion. You may use regular sheets of A4 (30x21 cm) or Letter (11x8.5 inches) format. The size of paper for the background should be a bit bigger than the picture size of the resulted frame.

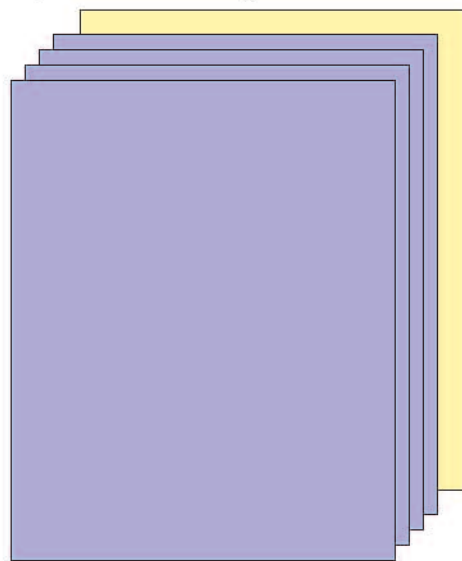
For instance, using sheets of Letter format, you may receive rectangular frames as big as the size of the Letter format itself, ie 11x8.5 inches. The maximum square frame will be 8.5x8.5 inches. Squares can be used for a mini frame.

Suggested paper: Paper should be strong and relatively thick. Copy paper works quite well. You may use various craft paper as well.

Suggested colours: It can be any colour you wish. It's good to use a lighter shade for the background, when the frame is meant for displaying little objects.

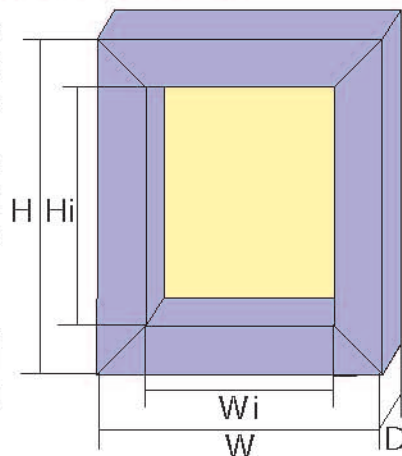


Out of the same set of rectangles, say Letter format or any other format close to 3x4 in proportion, you can receive different sizes and shapes of the shallow shadowbox frame: small, middle or large; square or rectangular.



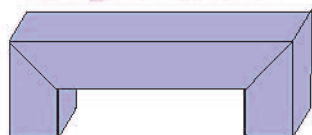
There are two types of planks used in this design - top/bottom plank and side plank. For the frame we will need 1 top plank, 1 bottom plank and 2 side planks. All the planks share the first 4 steps of pre-folding and then fold differently and depending on options you choose.

The width and height of your frame will be determined in steps 5 and 6 of folding the planks, as the distance in the middle between the side flaps.



W - width
Wi - picture, width
H - height
Hi - picture, height
D - depth

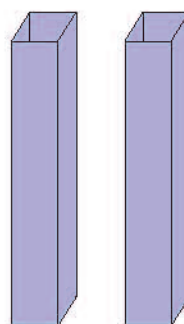
Top Plank



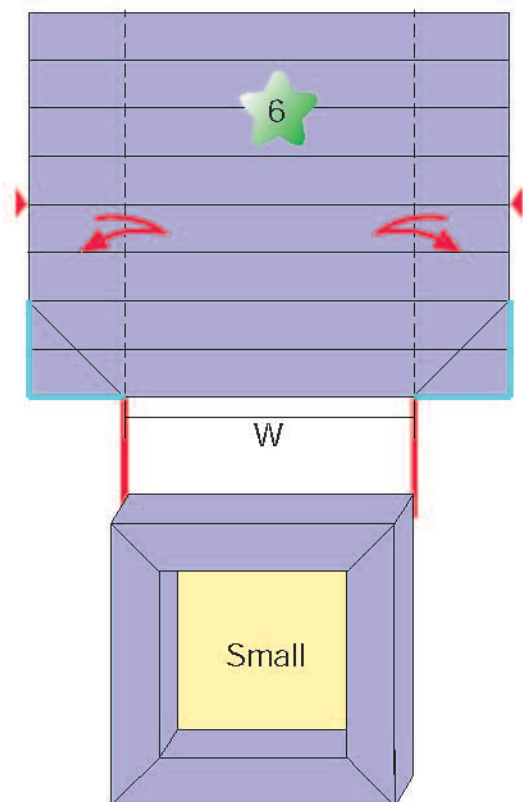
Bottom Plank



Side Planks



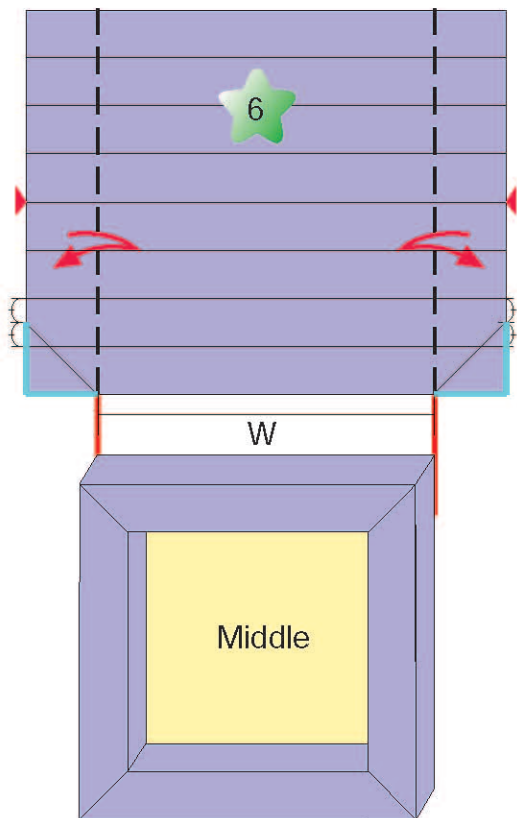
So here are some basic options for different sizes and shapes of the shallow shadowbox frame.



The base folding process in this article is shown for the small square frame. In steps 5 and 6 of folding the top/bottom planks, there will be marking-off as it is shown here. The resulted distance in the middle (W) will be the width of the future frame. Since it's a square frame, the side planks have to be marked-off in the same way (in steps 5 and 6), so that the height (H) is equal to the width (W).



Small Square Frame / paper format used	LETTER format, 8-1/2 x 11 inches	A4 format, 21 x 29.7 cm
width	6-3/4" (17.5 cm)	19.2 cm (7-1/2")
height	6-3/4" (17.5 cm)	19.2 cm (7-1/2")
depth	1-1/16" (2.7 cm)	2.6 cm (1-1/16")
picture, width	4-3/4" (12 cm)	14 cm (5-1/2")
picture, height	4-3/4" (12 cm)	14 cm (5-1/2")



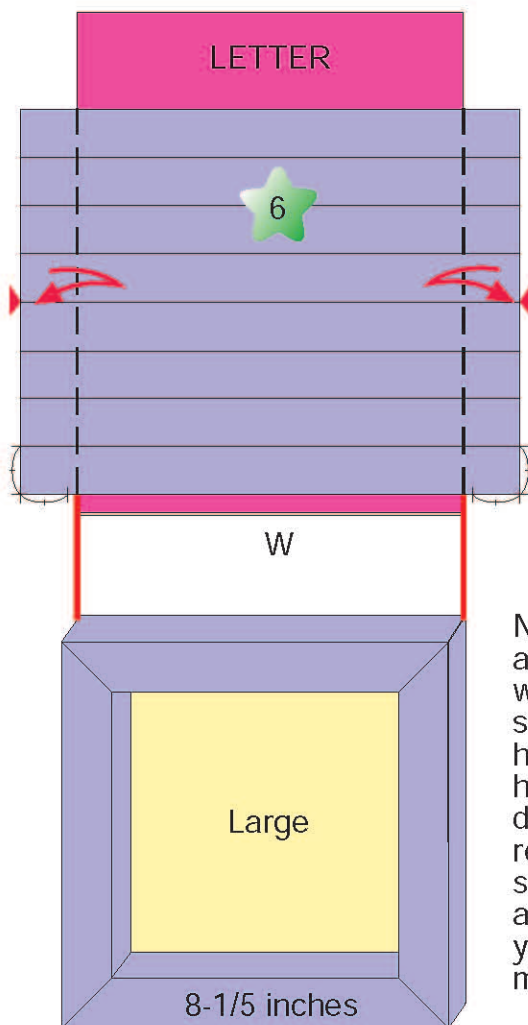
Middle Square Frame

The shown marking-off for both types of planks will result in the middle square frame. Make sure to do it in steps 5 and 6 of folding the top/bottom planks and side planks.

Middle Square Frame / paper format used	LETTER format, 8-1/2 x 11 inches	A4 format, 21 x 29.7 cm
width	7-3/4" (20 cm)	21.8 cm (8-3/4")
height	7-3/4" (20 cm)	21.8 cm (8-3/4")
depth	1-1/16" (2.7 cm)	2.6 cm (1-1/16")
picture, width	5-1/2" (14 cm)	16.6 cm (6-5/8")
picture, height	5-1/2" (14 cm)	16.6 cm (6-5/8")

Large Square Frame

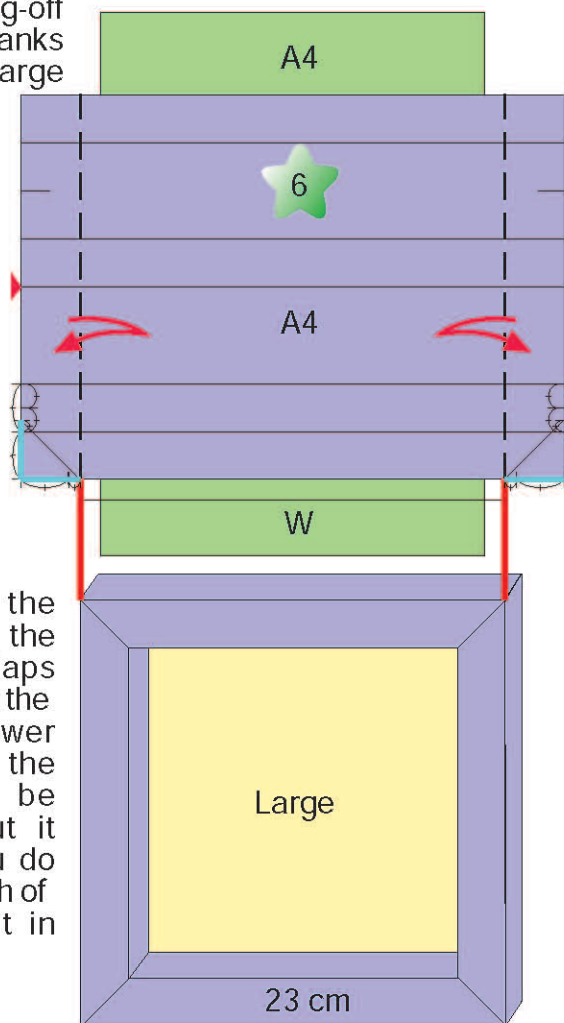
Large Square Frame / paper format used	LETTER format, 8-1/2 x 11 inches	A4 format, 21 x 29.7 cm
width	8-1/2" (22 cm)	23 cm (9-1/4")
height	8-1/2" (22 cm)	23 cm (9-1/4")
depth	2-1/8" (5.3 cm)	5.25 cm (2-1/8")
picture, width	6-3/8" (16 cm)	18 cm (7-1/8")
picture, height	6-3/8" (16 cm)	18 cm (7-1/8")

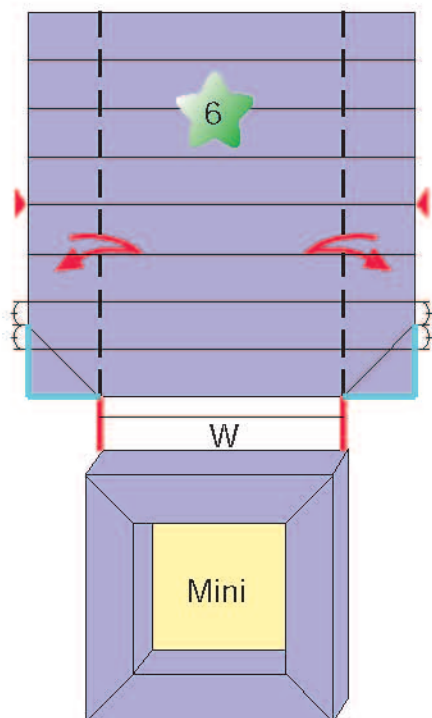


The shown marking-off for both types of planks will result in the large square frame.

Make sure to do it in steps 5 and 6 of folding the top / bottom planks and side planks.

Note that due to the assembly specifics, the width of the side flaps should be bigger than the height of the lower horizontal section; the difference can be relatively small but it should exist. If you do any other custom width of your frame, keep it in mind.





Mini Square Frame

If instead of rectangles you will use squares, then it will result in a mini frame of cute proportions. Follow the shown marking-off for planks to get such a square frame.

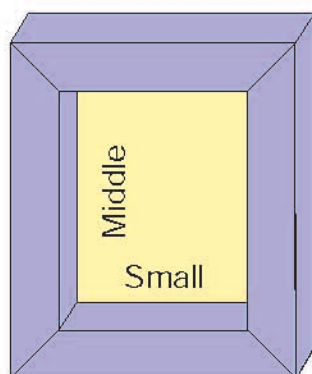
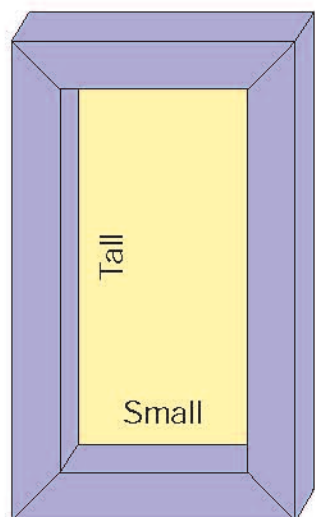
Make sure to do it in steps 5 and 6 of folding of the both types of planks - the top/bottom planks and side planks.



Mini Square Frame with Dragonfly

Mini Square Frame / paper format used	8-1/2" square made from LETTER format	21-cm square made from A4 format
width	5-1/4" (13 cm)	12.5 cm (5")
height	5-1/4" (13 cm)	12.5 cm (5")
depth	1-1/16" (2.7 cm)	2.6 cm (1-1/16")
picture, width	3" (7.5 cm)	7 cm (2-3/4")
picture, height	3" (7.5 cm)	7 cm (2-3/4")

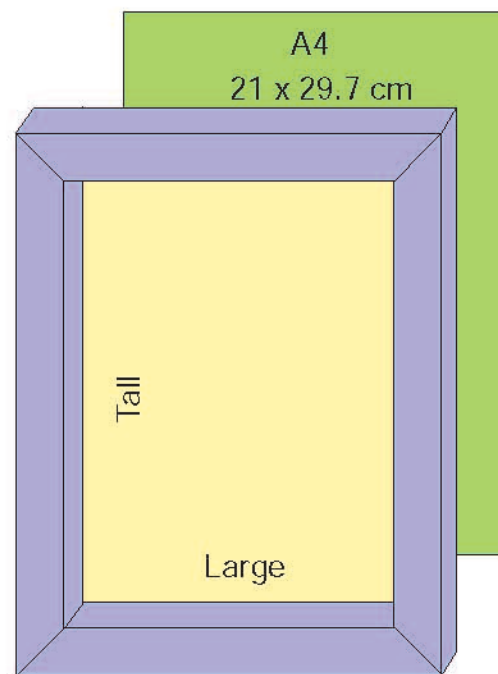
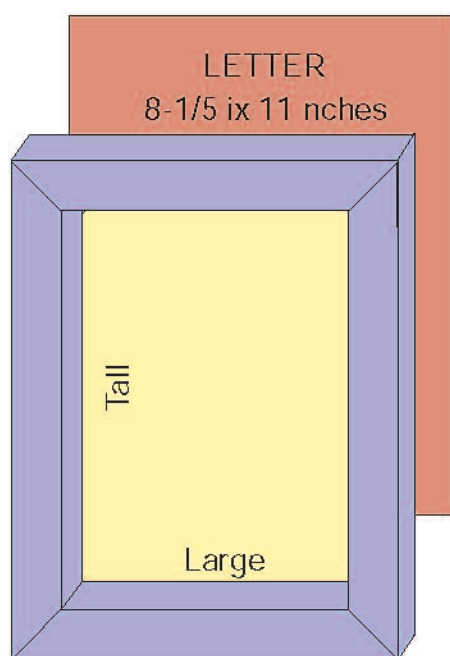
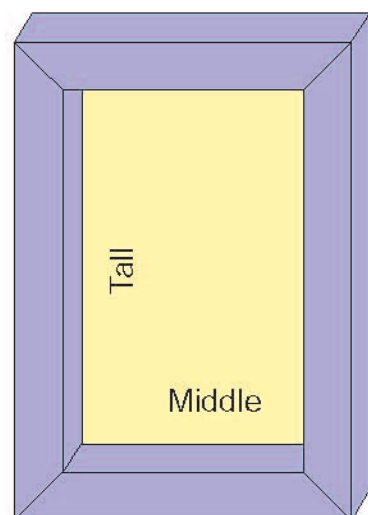
Rectangular Frames



Varying the size of planks allow to produce various rectangular frames. The height of the side planks can be as tall as the height of the initial rectangle.

When using sheets of Letter format, the maximum size of the frame will be as big as the size of the Letter format itself, ie 11x 8-1/2 inches.

When using sheets of A4 format, the maximum size of the frame will be 23 x 29.7 cm which is even bigger than the A4 format itself.

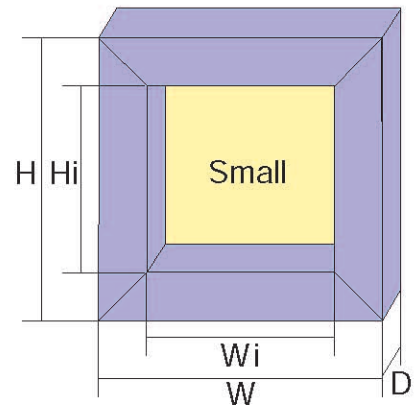


Small Square Frame Folding

The base folding process in this article is shown for the small square frame.



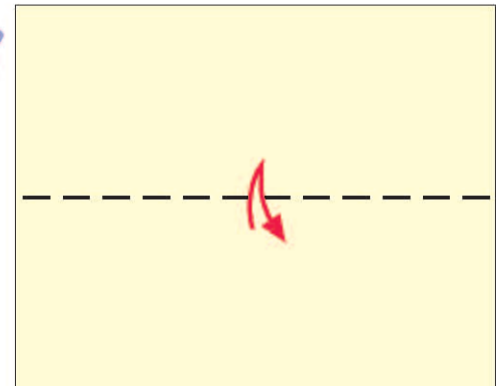
For the frame we will need 1 top plank, 1 bottom plank and 2 side planks. All the planks share the first 6 steps of pre-folding and then fold differently.



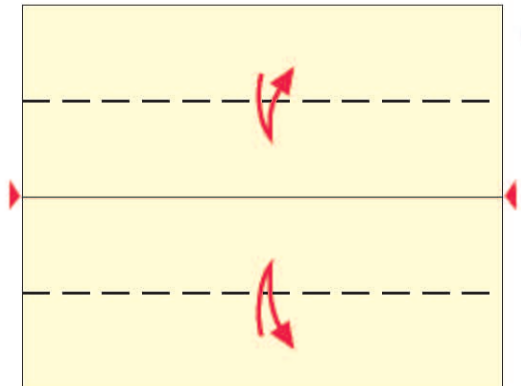
Plank Pre-Folding

If using two-colour paper, begin with coloured side down.

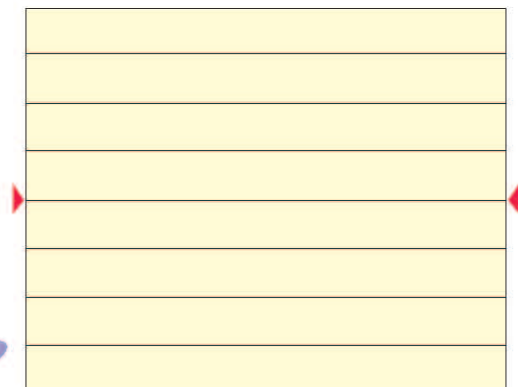
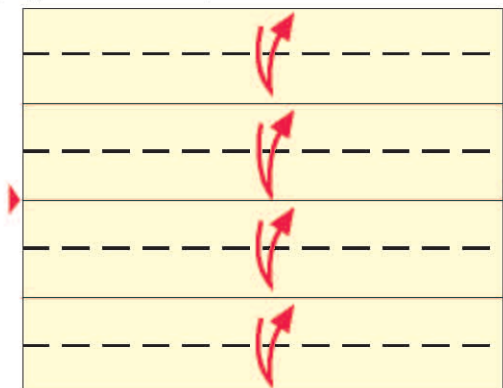
Place your rectangle longwise, coloured side down, as shown. Valley fold it in half from bottom to top. Press the fold flat and unfold it.



Valley fold the bottom and top edges to the horizontal middle fold-line. Press them flat and unfold them, thereby marking 4 equal horizontal sections.



Now valley fold each horizontal section in half and unfold it, therefore dividing the paper into 8 equal horizontal sections.

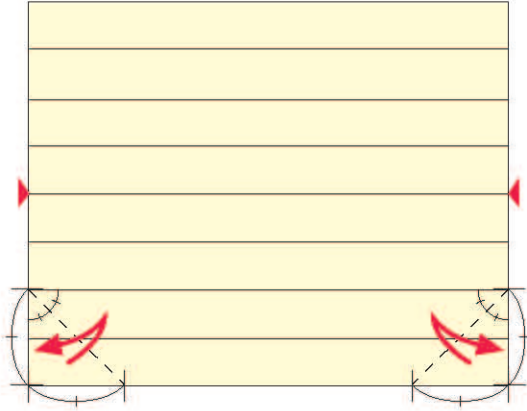


This should be the result. Now we have a pre-folded paper for a frame plank, no matter it's a side, top or bottom plank. So pre-fold other rectangles in the same way, so that you have 4 pre-folded rectangles for all the planks.

Top / Bottom Plank

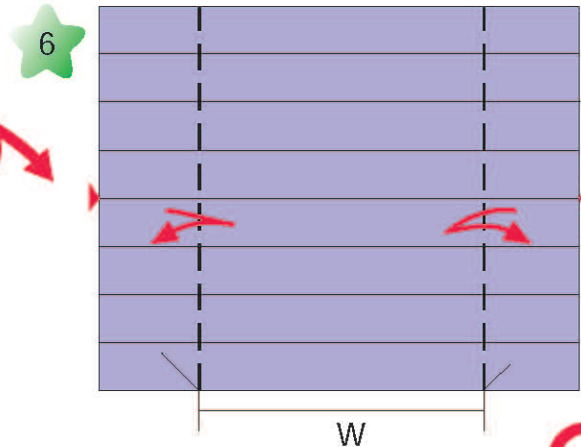
Working with the pre-folded rectangle, place it as shown. Now we are determining the width (W) of the future frame. The following marking-off is for the small frame. When using sheets of Letter format, the width will be 6-3/4 inches (17.5 cm).

- 5 Make the diagonal fold-marks over the two lower horizontal sections at sides, as shown. Then, turn the paper over.



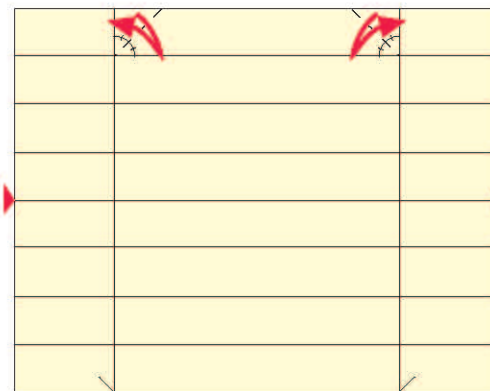
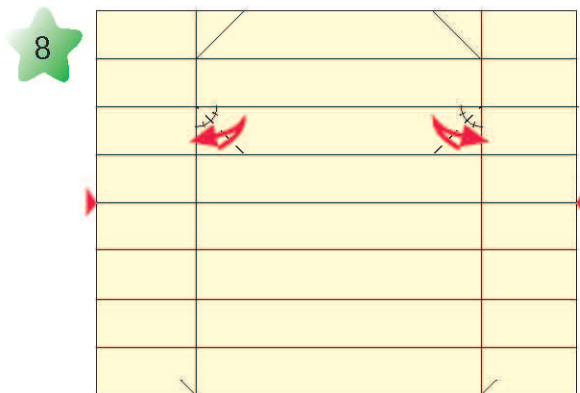
Valley fold the right- and left-hand sides being guided by the intersections of fold-marks and the bottom edge as shown. Press the folds flat and unfold them.

Now the resulted distance in the middle (W) will be the width of the future frame. Turn the paper over.

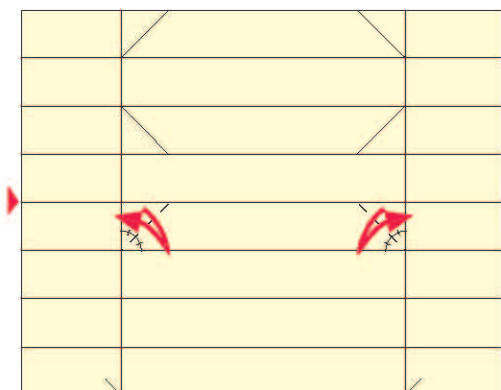


Working with the 3rd horizontal section from the top, by valley folding make the limited diagonal fold-lines as shown.

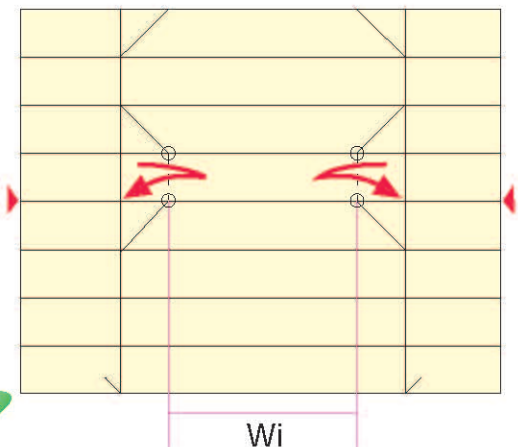
7 Working with the top horizontal section, by valley folding make the limited diagonal fold-lines as shown.



9 Working with the 4th horizontal section from the bottom, by valley folding make the limited diagonal fold-lines as shown.

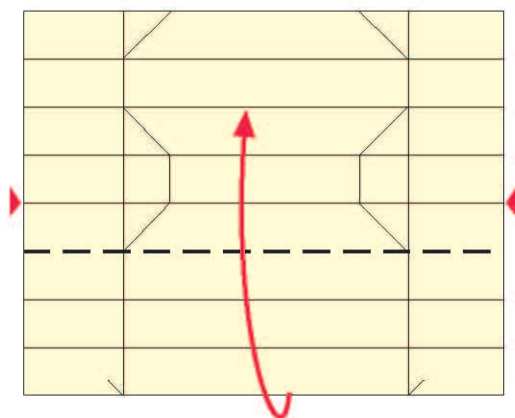


By valley folding, make the limited fold-lines between the intersections marked by the circles as shown. This will be the picture window width (Wi) of the future frame.

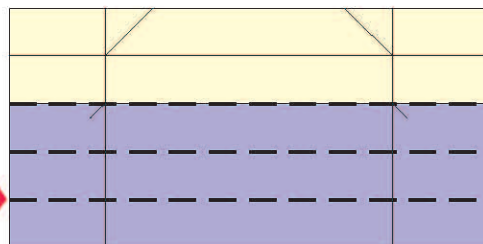


Valley fold 3 lower horizontal sections up as shown.

11



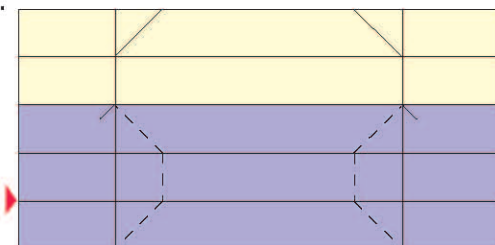
12



Re-fold the fold-lines of both layers into 'valleys' as shown.

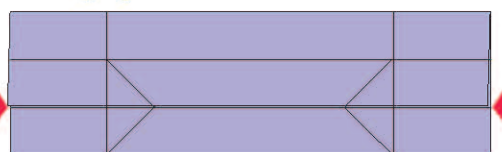
Emboss the folds made in steps 8 to 10 on the front layer, as shown.

13



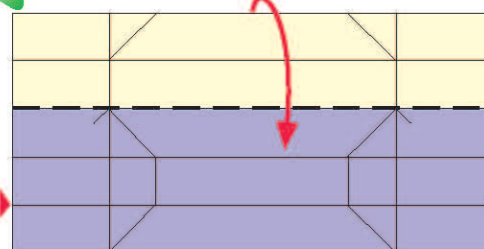
15

This should be the result. Turn the paper over (from side to side).



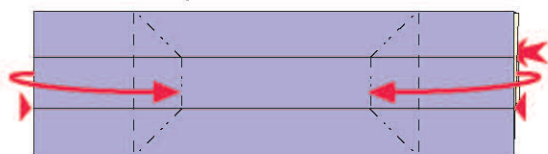
14

Valley fold 2 upper horizontal sections down, as shown.



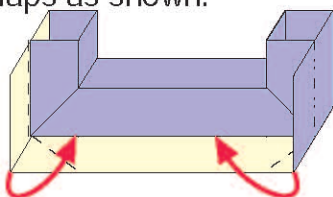
Separating the two front layers from the one back layer, shape the paper along the existing fold-lines into the position shown in the next step.

16



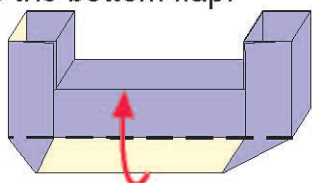
This should be the result. Along the existing fold-lines, close the side flaps as shown.

17



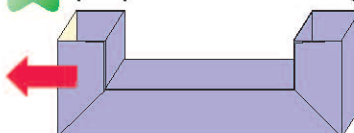
This should be the result. Now close the bottom flap.

18



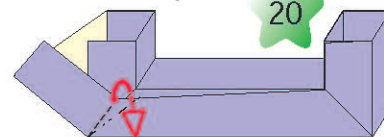
19

Pull out the left-hand side flap in order to prepare it for locking.

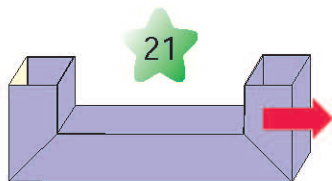


This should be the result. Working with the left-hand side flap, direct the "valley" fold into the pocket between the layers, inserting the "step fold" into the "pocket", thereby locking the side flap. The flat bone folder or something similar can be helpful.

20



This action was shown in detail in the article 'Deep Shadowbox Frame (1:2 Rectangle Profile, 4 modules)', steps 20 to 22, article page 9 (book page 16).



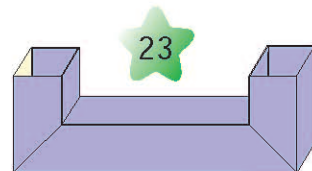
21

This should be the result. Now pull out the right-hand side flap in order to prepare it for locking.



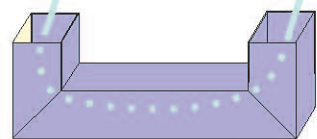
22

Working with the right-hand side flap, direct the "valley" fold into the pocket between the layers, inserting the "step fold" into the "pocket", thereby locking the side flap.

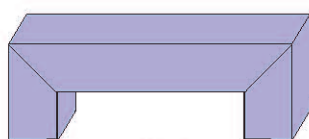


23

This should be the result. The top/bottom plank is ready.



Bottom Plank



Top Plank

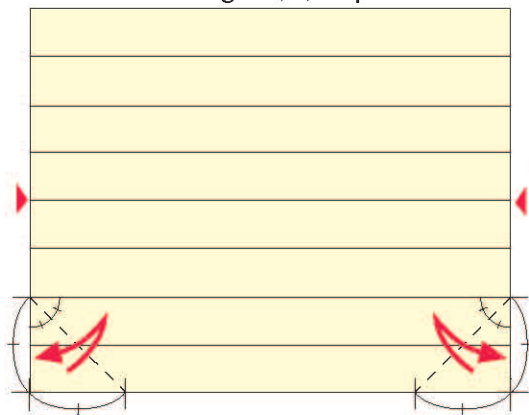
24

Fold one more plank in the same way, so there should be the top plank and the bottom plank, optionally the latter also might have a piece of line inserted into it as shown in the article 'Deep Shadowbox Frame (4 modules, 1:2 Rectangle Profile)', step 17, article page 9 (book page 16).

Small Side Plank

Working with the pre-folded rectangle, place it as shown.

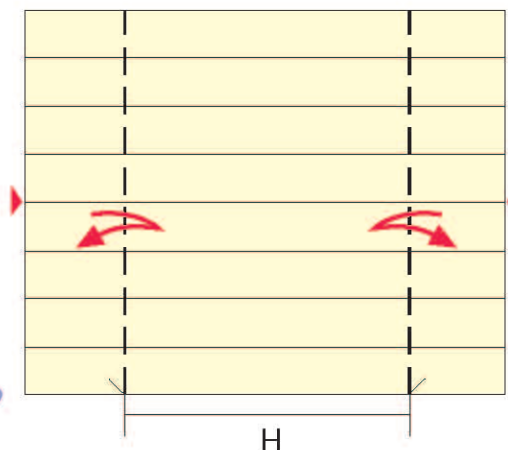
Now we are determining the height (H) of the future frame. In this case, as we do a square frame, we'll do the height (H) equal to the width (W).



5

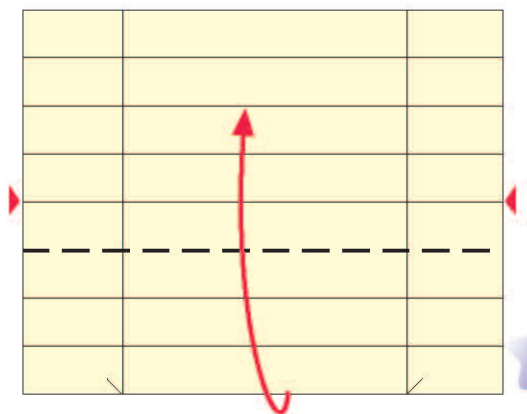
The following marking-off is for the small frame. When using sheets of Letter format, the height will be 6-3/4 inches (17.5 cm).

Make the diagonal fold-marks over the two lower horizontal sections at sides, as shown.



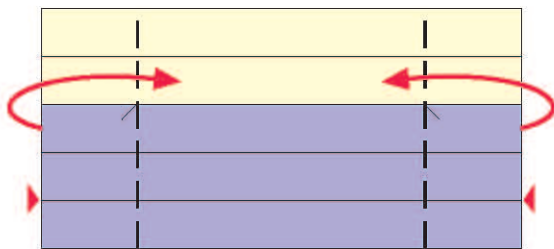
6

Valley fold the right- and left-hand sides being guided by the intersections of fold-marks and the bottom edge as shown. Now the resulted distance in the middle (H) will be the height of the future frame.



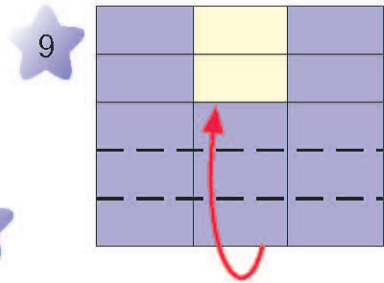
7

Valley fold 3 lower horizontal sections up as shown.

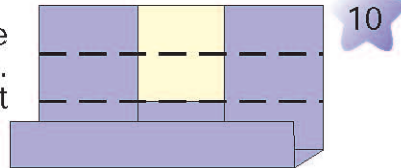


8
Valley fold the right- and left-hand sides along the existing fold-lines.

This should be the result. Fold the bottom flaps into the position shown in the next step.

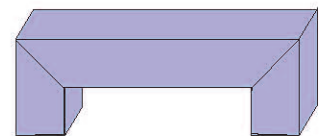
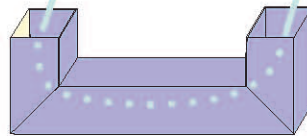
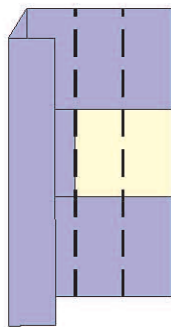
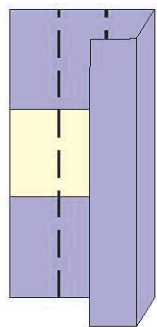


This should be the result. The side plank is ready for the assembling. Make another one like this, so that you have 2 side planks.



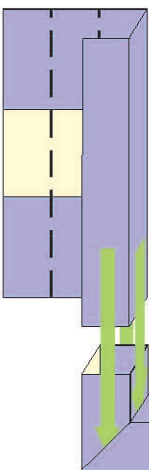
Small Square Frame Assembly

Get ready the top plank, the bottom plank (optionally with the line threaded through it) and 2 side planks.



If for hanging purposes, you would like to integrate a piece of line into the frame, see how to do that in the article 'Deep Shadowbox Frame (4 modules, 1:2 Rectangle Profile)' and then apply the same technique for this frame.

Place the bottom plank by the back side, where there is a slit. Consistently insert each side plank, sliding it down between the layers of the bottom plank as shown.

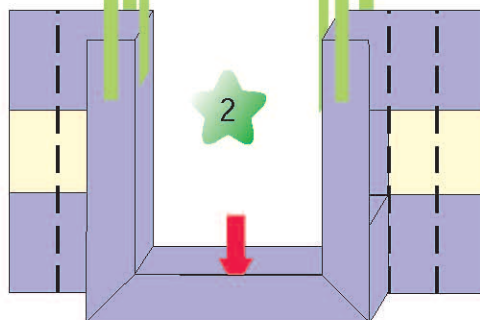


1

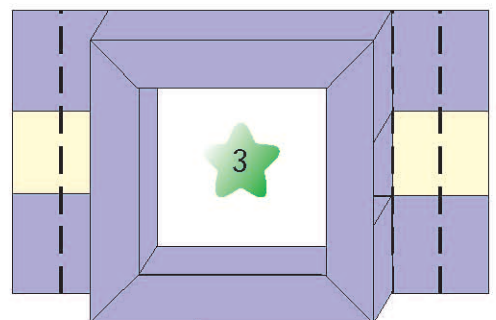
Now take the top plank by its back side with the slit and place it atop the side planks. Step-by-step, insert each side plank, sliding it between the layers of the top plank as shown.



2

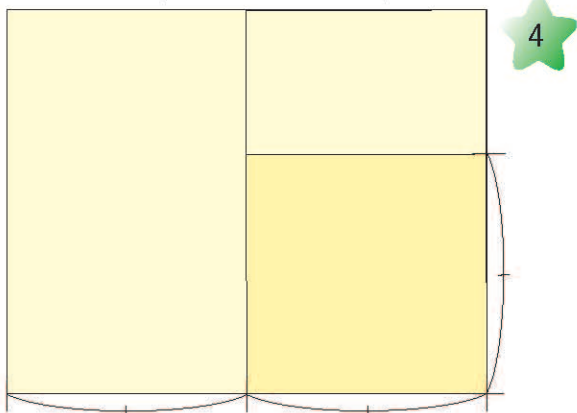


This should be the result.

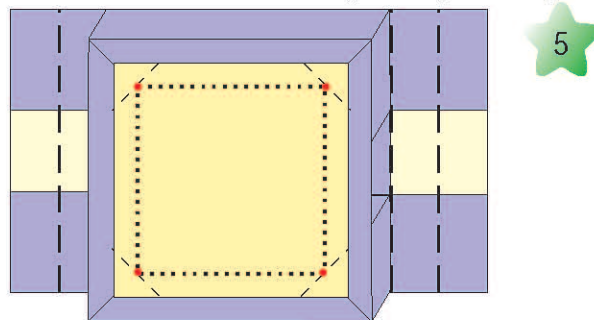


3

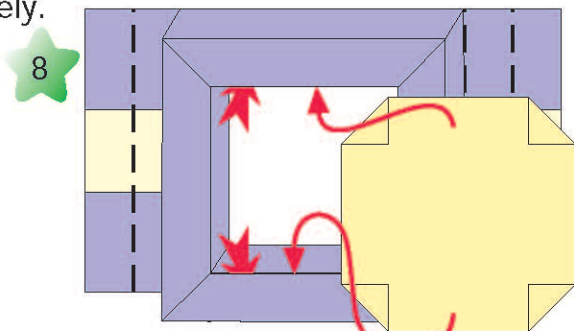
Now we need to prepare a piece of paper for the background. For this particular square frame, cut out a square, which side is a half of the rectangle used for the plank, as shown.



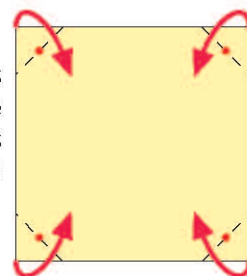
Place it on the frame, aligning their centers, and mark the intersection points as shown. You may direct the whole construction against light to see the intersections and make the marks, or just find the intersections tactily with your fingertips.



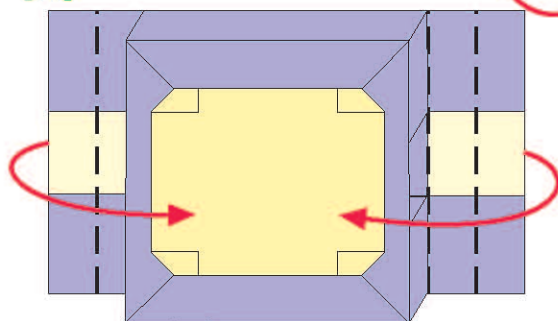
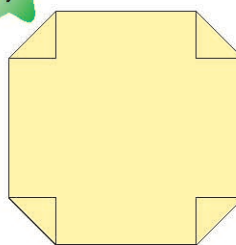
Insert the top and bottom edges of the background paper into slits of the top and bottom planks respectively.



Fold the corners over the marked dots as shown. Now the background paper is ready to be inserted into the frame.

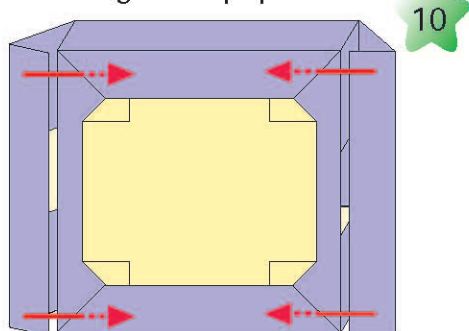


This should be the result.

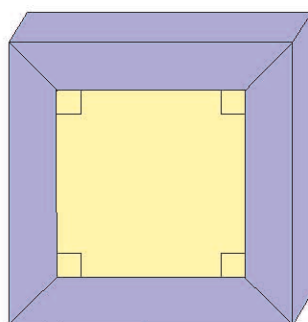
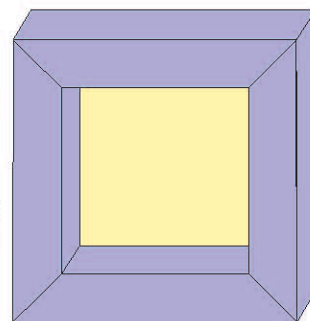


This should be the result. Adjust the background paper, so that it's centered. Now fold the side flaps of the side planks around and toward you, as shown.

This should be the result. Now gently insert the side flaps into the pockets as shown and move them inside as far as they will go. Note that the flaps have to be atop and covering the background paper.



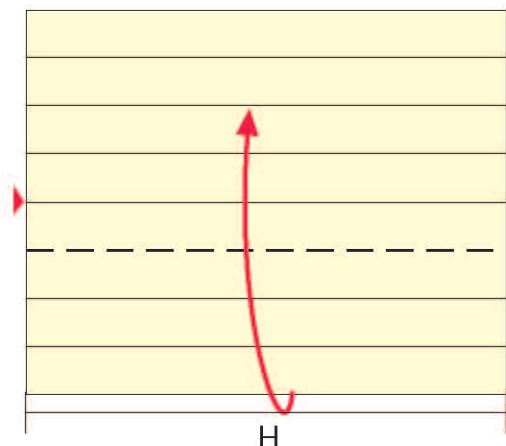
Here is the completed 4-Module Shallow Shadowbox Frame (with square profile) of the square shape and the small type.



This should be the result. When you need to change the background paper, just open the side flaps slightly pushing the inner edges out of pockets. Change the paper and insert the side flaps into the pockets again.

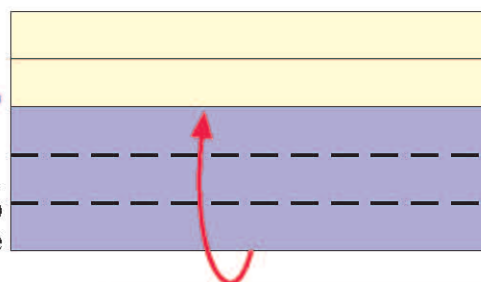


Tall Side Plank



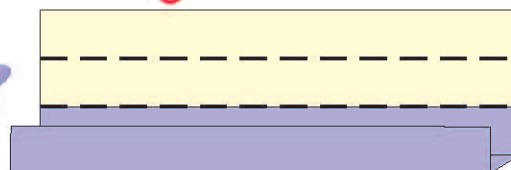
When making a tall rectangular frame, you may use all the length of the initial rectangle to get the tall side planks. Working with the pre-folded rectangle, place it as shown. Now we are determining the height (H) of the future frame. In this case as we do a side plank for a tall frame, we'll use the entire height of the initial rectangle.

Valley fold 3 lower horizontal sections up as shown.



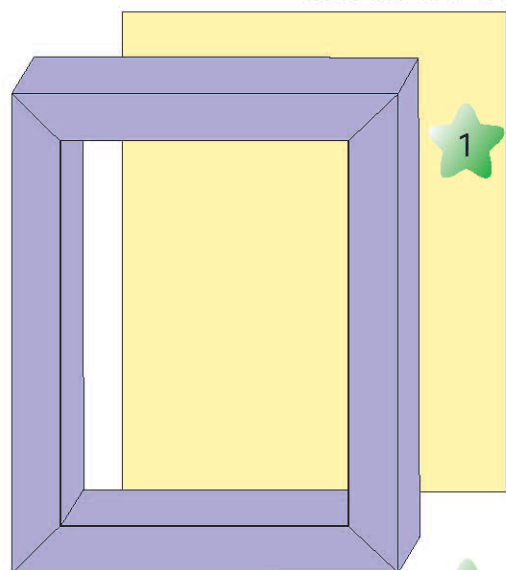
This should be the result. Fold the bottom flaps into the position shown in the next step.

This should be the result. The tall side plank is ready for the assembling. Make another one like this, so that you have 2 side planks.



Rectangular Frame Assembly

Get ready the top plank, the bottom plank (optionally with the line threaded through it) and 2 tall side planks.



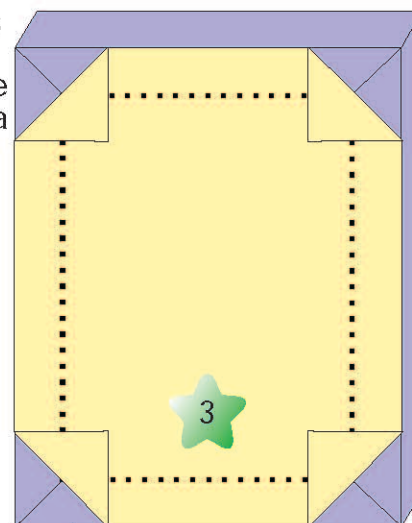
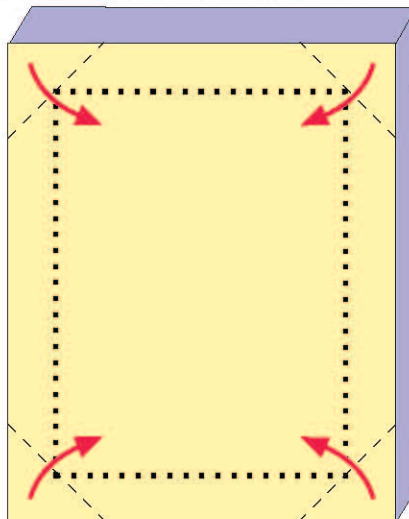
Assemble the planks into a frame in the same way as it was shown for the Square Frame Assembly earlier in this article.

Now we need to prepare a piece of paper for the background. In general, the size of paper for the background should be a bit bigger than the picture size of the resulted frame.

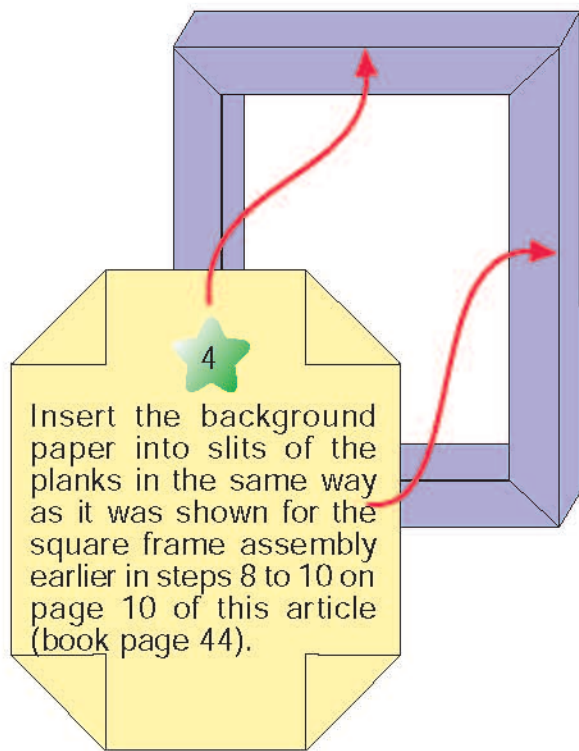
For instance, if there were used sheets of Letter format to receive your rectangular frame as big as the size of the Letter format itself, ie 11x8.5 inches, then for the background you may use a sheet of Letter format too.



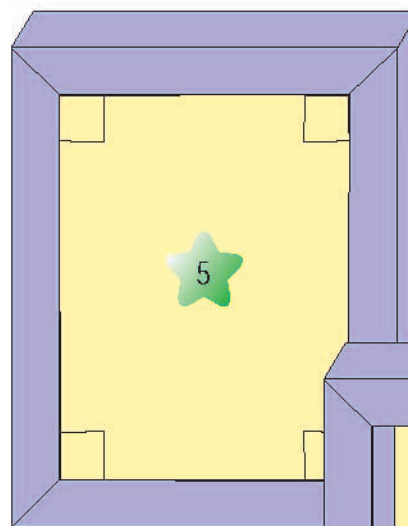
Place the background paper on the frame, aligning their centers, and mark the intersection points as shown. You may direct the whole construction against light to see the intersections and make the marks, or just find the intersections tactilely with your fingertips.



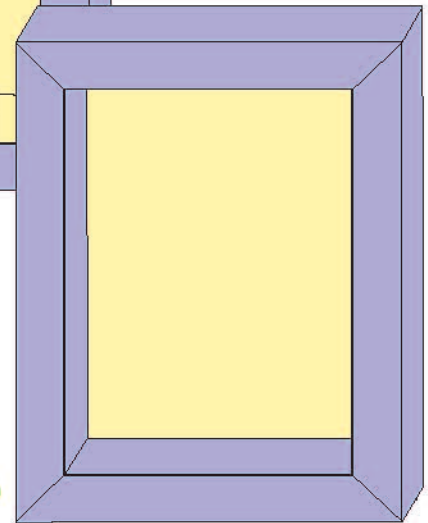
Fold the corners over the marked dots as shown. Now the background paper is ready to be inserted into the frame.



Insert the background paper into slits of the planks in the same way as it was shown for the square frame assembly earlier in steps 8 to 10 on page 10 of this article (book page 44).



This should be the result. Turn the frame over.



Here is the completed 4-Module Shallow Shadowbox Frame (with square profile) of the rectangular shape and the large type.



Small Square Frame with Mini-Oribana



Mini Square Frame with Dragonfly



Large Square Frame (8-1/2 inches) with a photo



Shallow Shadowbox Frame

(Square Profile, 2 Modules)

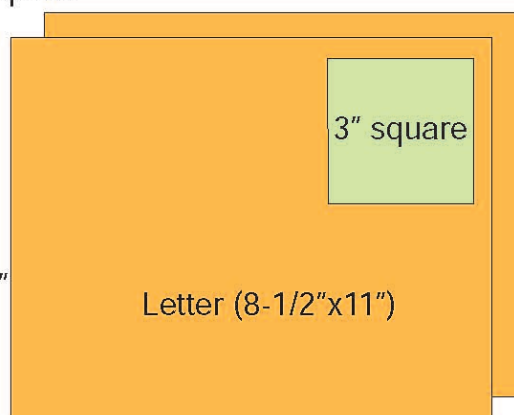
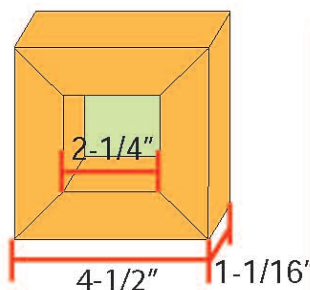
by Yuri Shumakov

This is an elegant design of a classic looking shallow shadowbox frame with the square profile that folds from 2 modules. It uses the same principle of folding as the 4-module Shallow Shadowbox Frame. It's good for displaying little origami models or pictures. You will need 2 identical rectangles and 1 piece of paper for the background.

Suggested sizes: Use rectangles somewhat from 3:4 proportion and longer depending on the size you'd like your frame to be. You may use regular sheets of A4 (30x21 cm), Letter (11x8.5 inches) or Legal (14x8.5 inches) format. A square for the background should be a bit bigger than the picture size of the resulted frame.

For instance, using sheets of Letter format (8-1/2 x 11 inches) will result in a rather tubby square frame, which side is 4-1/2-inches; depth - about 2-1/8 inches; picture side - about 2-1/4 inches. Use a 3-inch square or so for the background.

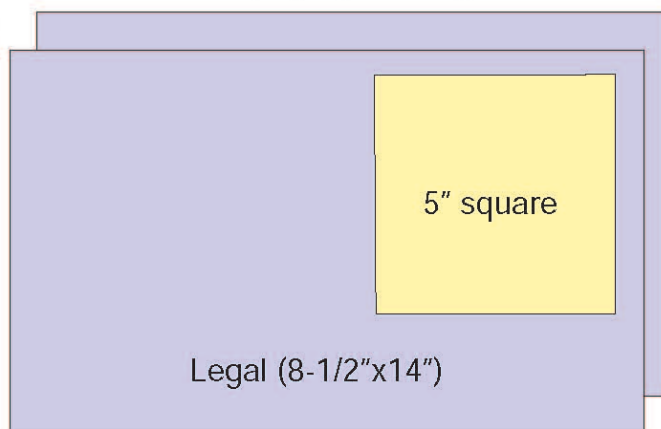
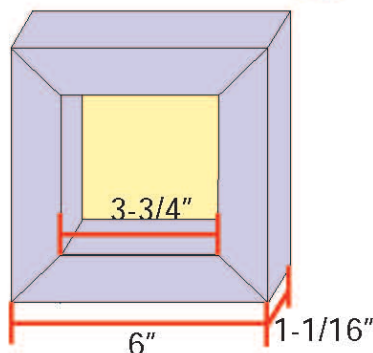
When using sheets of Legal format (8-1/2 x 14 inches) it will result in a square frame, which side is 6 inches; depth - about 2-1/8 inches; picture side - about 3-3/4 inches. Use approximately a 5-inch square for the background.



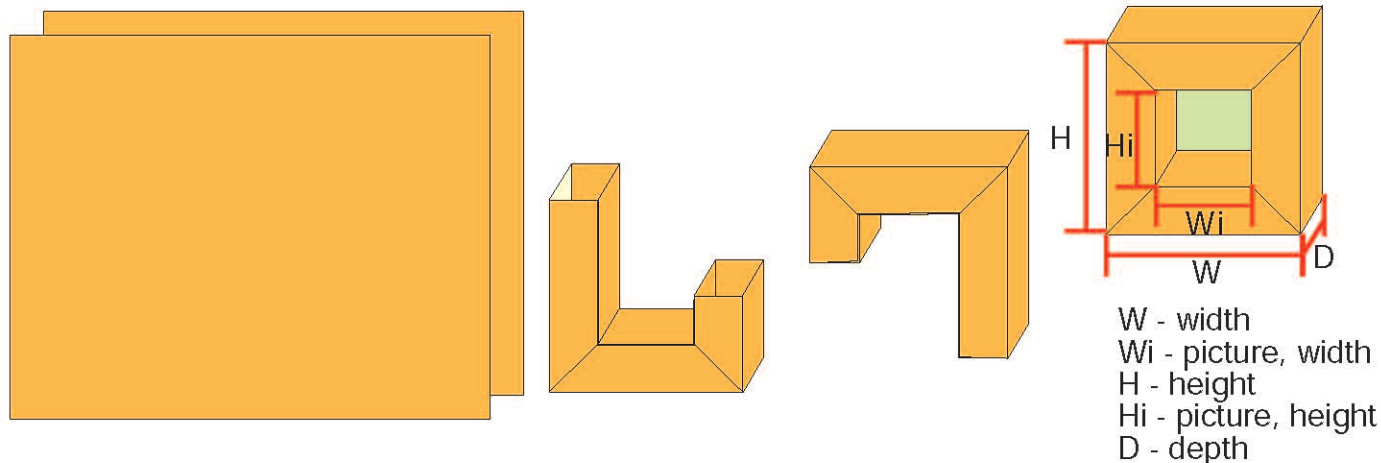
Suggested colours: It can be any colour you wish. It's good to use a lighter shade for the background, when the frame is meant for displaying little objects.



Suggested paper: Paper should be strong and relatively thick. Copy paper works quite well. You may use various craft paper also.



This shadowbox frame consists of two identical L-plank modules, each folded from a rectangle.

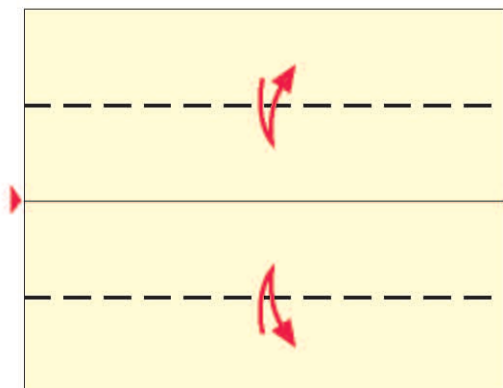


Shallow Shadowbox L-Plank Module

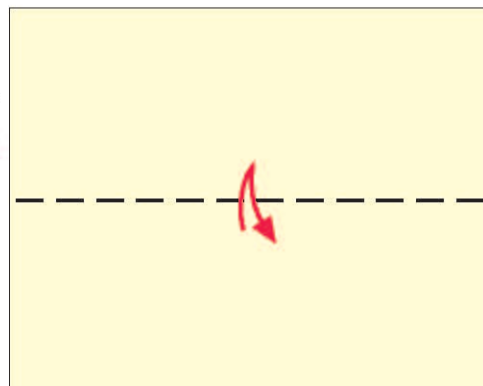
If using two-colour paper, begin with coloured side down.

Place your rectangle longwise, coloured side down, as shown. Valley fold it in half from bottom to top. Press the fold flat and unfold it.

Valley fold the bottom and top edges to the horizontal middle fold-line. Press them flat and unfold them, thereby marking 4 equal horizontal sections.

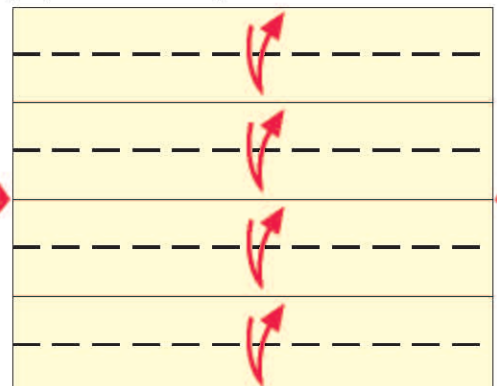


1



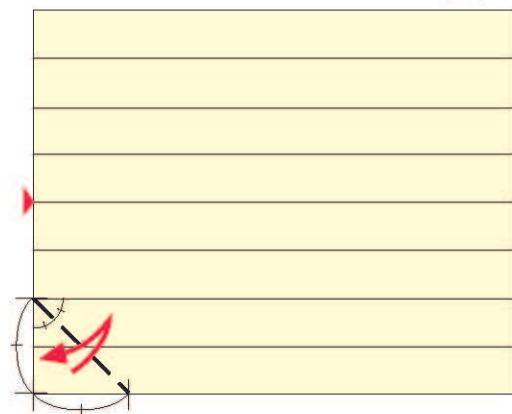
2

Now valley fold each horizontal section in half and unfold it, therefore dividing the paper into 8 equal horizontal sections.



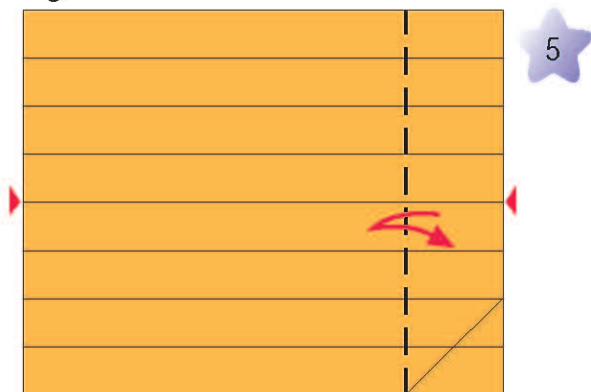
3

4

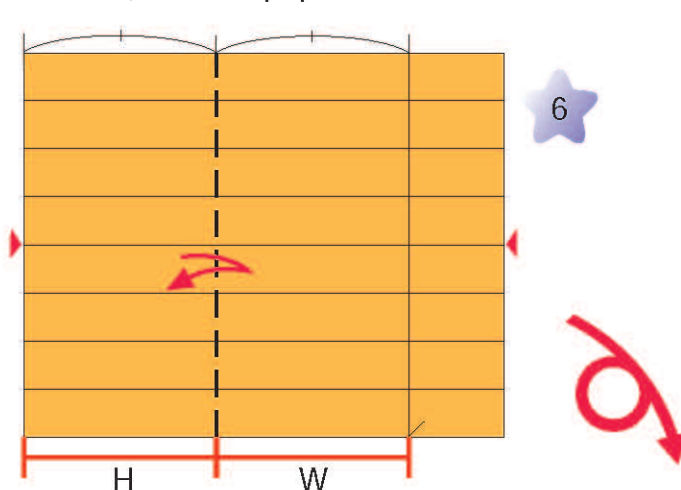


Make the diagonal fold-mark over the two lower horizontal sections at the left-hand side, as shown. Then, turn the paper over from side to side.

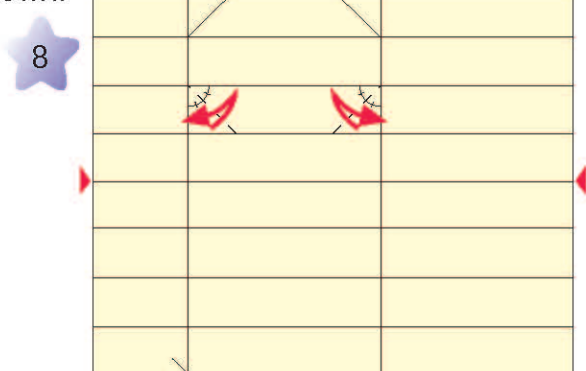
Valley fold the right-hand side being guided by the intersection of the fold-mark and the bottom edge as shown. Press the fold flat and unfold it.



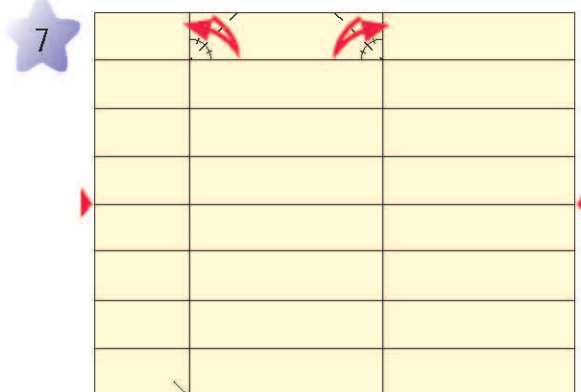
Valley fold the left-hand side over to the right to meet the fold-line made in the previous step. Then, turn the paper over from side to side.



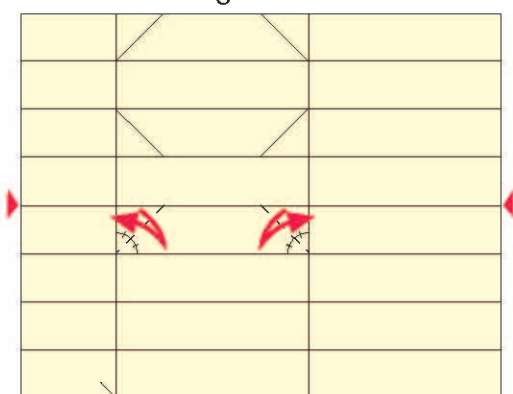
Working with the 3rd horizontal section from the top, by valley folding make the limited diagonal fold-lines as shown.



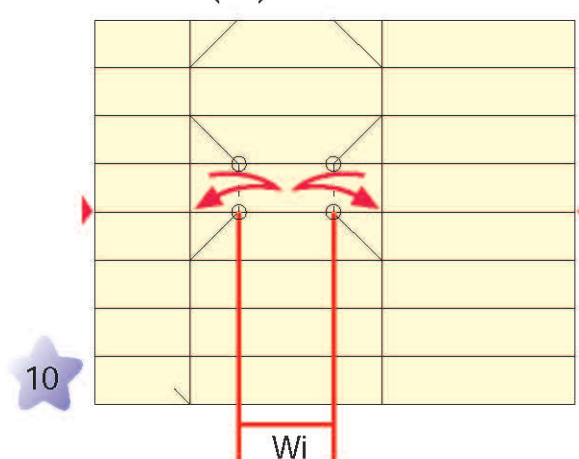
Working with the top horizontal section at the middle vertical section, by valley folding make the limited diagonal fold-lines as shown.



Working with the 4th horizontal section from the bottom, by valley folding make the limited diagonal fold-lines as shown.

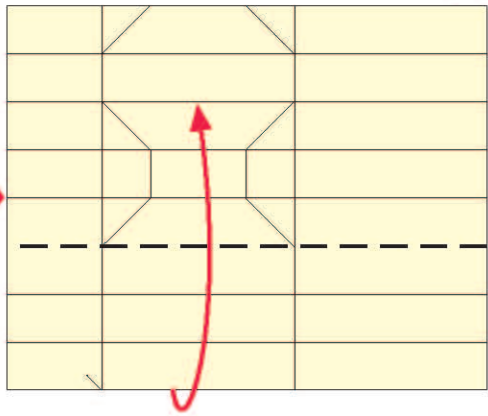


By valley folding, make the limited fold-lines between the intersections marked by the circles as shown. This will be the picture window width (Wi) of the future frame.



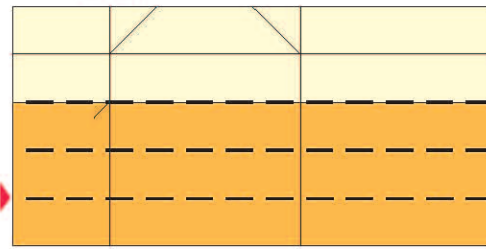
Valley fold 3 lower horizontal sections up as shown.

11



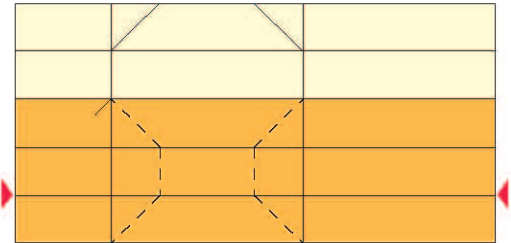
12

Re-fold the fold-lines of both layers into 'valleys' as shown.



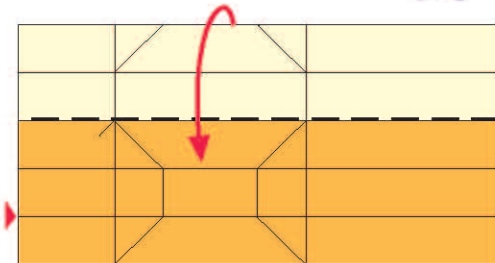
Emboss the folds made in steps 8 to 10 on the front layer, as shown.

13



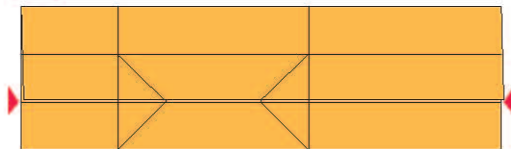
Valley fold 2 upper horizontal sections down, as shown.

14

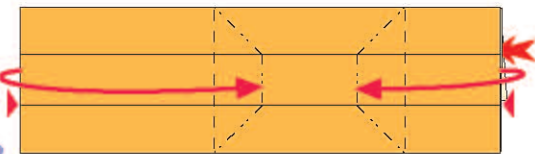


This should be the result. Turn the paper over (from side to side).

15



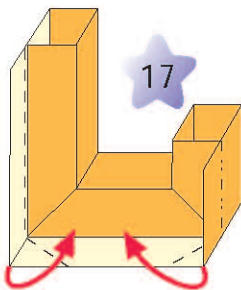
16



Separating the front layers from the one back layer, shape the paper along the existing fold-lines into the position shown in the next step.

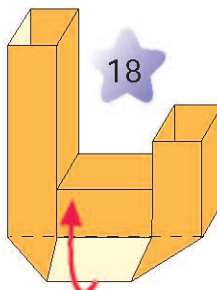
Working with the left-hand side flap, direct the "valley" fold into the pocket between the layers. Continue inserting the "corner" into the "pocket", thereby locking the side flap. The flat bone folder or something similar can be helpful.

17



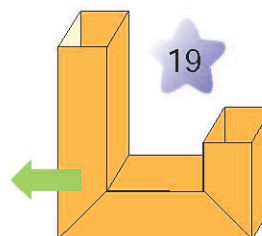
This should be the result. Along the existing fold-lines, close the side flaps as shown.

18



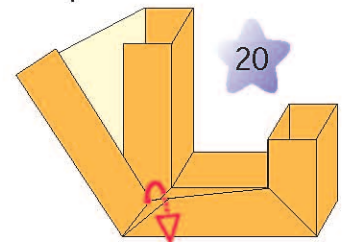
This should be the result. Now close the bottom flap.

19

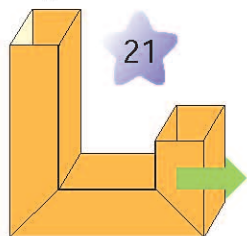


Pull out the left-hand side flap in order to prepare it for locking.

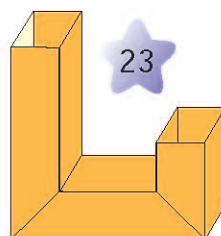
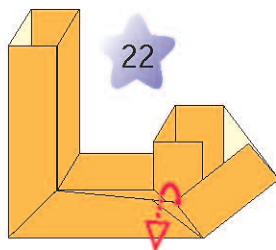
20



This should be the result. Pull out the right-hand side flap in order to prepare it for locking.



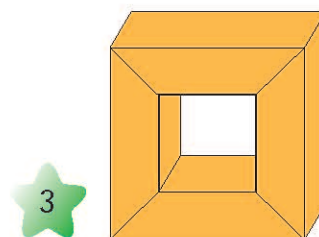
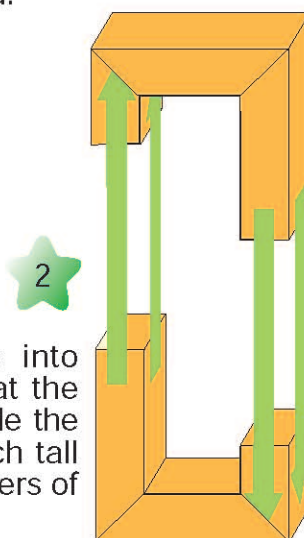
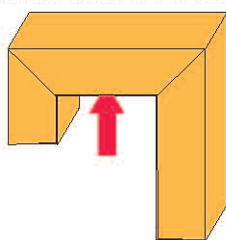
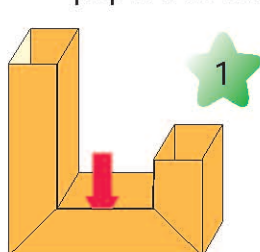
Working with the right-hand side flap, direct the "valley" fold into the pocket between the layers. Continue inserting the "corner" into the "pocket", thereby locking the side flap.



This should be the result. Here is the completed L-plank module for the 2-module Shallow Shadowbox Frame! Now make the second module in the same way.

2-Module Shallow Shadowbox Assembly

Get ready the two L-plank modules for the assembly, turning them by the back side, where there is a slit along the inner edge. This slit can be used to insert the background paper into the frame when needed.

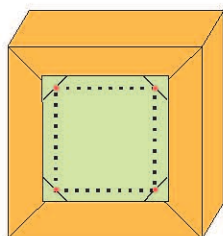
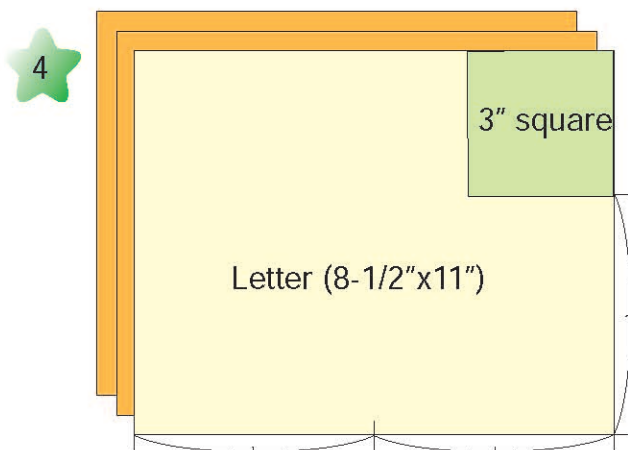


Insert the modules one into another as shown, so that the short side plank goes inside the tall side plank, sliding each tall side plank between the layers of the corresponding plank.

This should be the result. Here is the completed Shallow Shadowbox Frame with square profile from 2 modules.

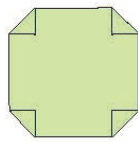
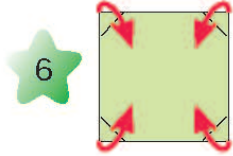
Now we need to prepare a piece of paper for the background. A square for the background should be a bit bigger than the picture size of the resulted frame. For this particular square frame, folded with sheets of Letter format (8-1/2 x 11 inches), use a 3-inch square or so for the background.

When using sheets of Legal format (8-1/2 x 14 inches, use approximately a 5-inch square for the background.

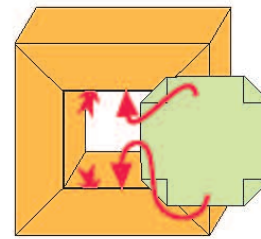


Place the background paper on the frame, aligning their centers, and mark the intersection points as shown. You may direct the whole construction against light to see the intersections and make the marks, or just find the intersections tactilely with your fingertips.

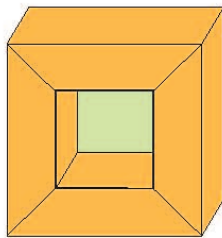
Fold the corners over the marked dots as shown.



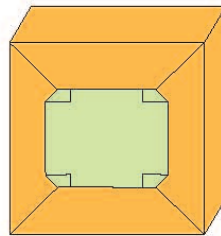
Now the background paper is ready to be inserted into the frame.



Insert the top and bottom edges of the background paper into slits of the top and bottom planks respectively.



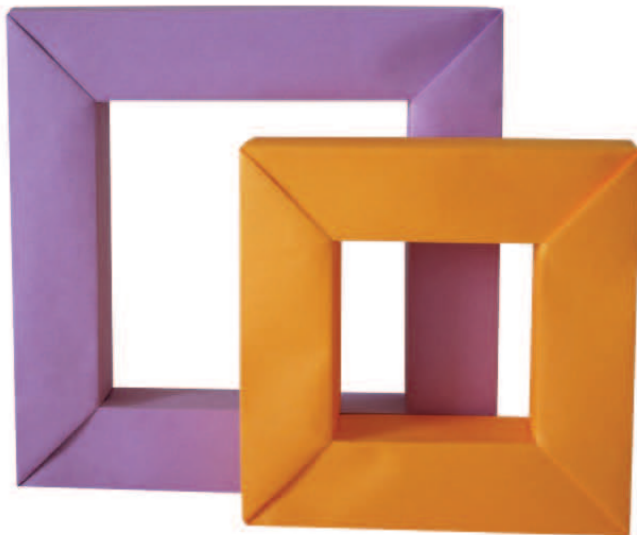
Congratulations! Here is the completed Shallow Shadowbox Frame with square profile from 2 modules with the background paper.



This should be the result. Adjust the background paper, so that it's centered. Then, turn the frame over.



*Square Frame
(folded from Letter size)*



Now you may fold the various sizes of the 2-module Shallow Shadowbox Frame with square profile. This frame is perfect for displaying little origami models. Enjoy!



*Square Frame
(folded from Legal size)
with a Dress*



Shadowbox Frame (Equilateral Triangle Profile)

by Yuri Shumakov

This is a very effective and efficient design of a shadowbox frame with the equilateral triangle profile that casts a nice shadow on the image. Folds from 4 modules and can be folded into a square or rectangular frame. It's good for displaying pictures and small artworks.

You will need 4 rectangles, each for one side, and 1 piece of paper for the back side. The various proportions of the original rectangle will result in different variations of the frame - slim, middle, and tubby.

Also, optionally, for a hanger prepare a piece of line or thread that in length is a bit longer than the frame's perimeter. Fishing line works best for it. The line can be integrated into the frame during folding in the same manner as it's shown in the article 'Deep Shadowbox Frame (1:2 Rectangle Profile, 4 modules)'.

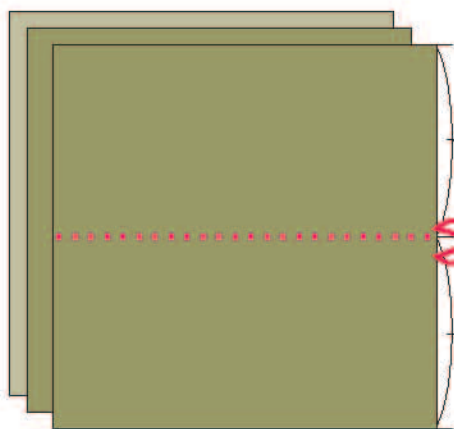
Suggested sizes: You may use rectangles of regular formats of A4 (29.7x21 cm) or Letter (11x8.5 inches) for practice.

Suggested paper: Paper should be strong and relatively thick. Copy paper works quite well. You may use various craft paper as well.

Suggested colours: It can be any colour you wish. It's good to use a lighter shade for the background, when the frame is meant for displaying little objects.



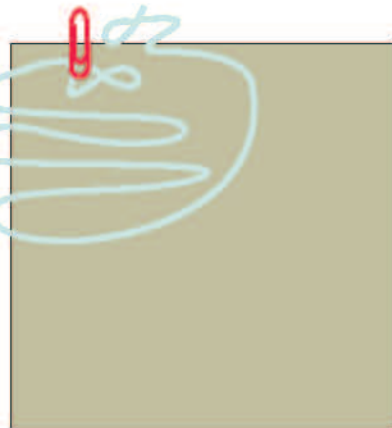
Slim Square Frame



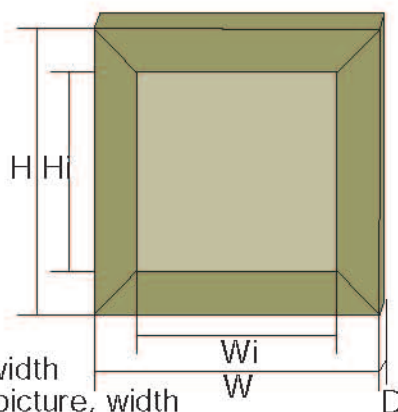
You will need 3 squares in total, 2 of which will be used to get 4 rectangles for planks and 1 square for the back piece.

When using sheets of Letter format (11 x 8-1/2 inches) to get 8-1/2 inch squares, it will result in a 6-1/2-inch square frame with a 4-3/4-inch square picture space, and frame's depth as 1 inch.

So, cut 2 squares in half, thereby making 4 equal rectangles, each 1:2 in proportion.



Equilateral Triangle Profile



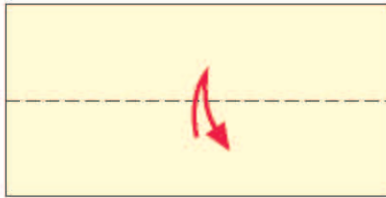
W - width
Wi - picture, width
H - height
Hi - picture, height
D - depth

When using sheets of A4 format (29.7 x 21 cm), to get 21-cm squares, it will result in about a 15.75-cm square frame with a 10.5-cm square picture space, and frame's depth as 2.6 cm.

Plank Pre-Folding

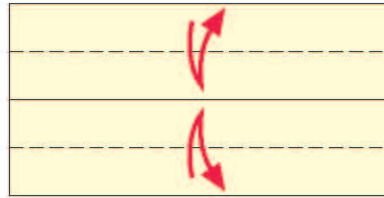
If using two-colour paper, begin with coloured side down.

Place your rectangle longwise, coloured side down, as shown. Valley fold it in half from bottom to top. Press the fold flat and unfold it.

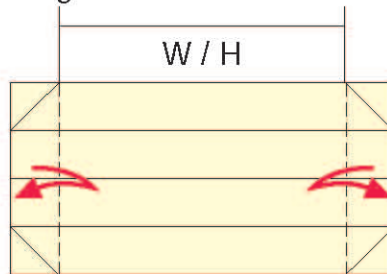


1

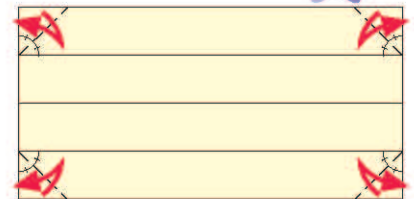
2 Valley fold the bottom and top edges to the horizontal middle fold-line. Press them flat and unfold them, thereby marking 4 equal horizontal sections.



The resulted distance in the middle (W / H) will be either width or height of the future frame.

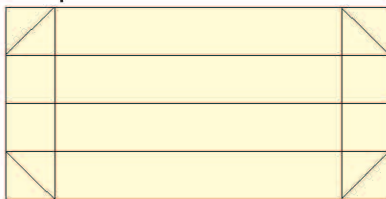


Valley fold and unfold the side corners, thereby making the diagonal fold-marks on the upper and lower horizontal sections.



3

This should be the result. Now we have a pre-folded paper for a frame plank, no matter it's a side, top or bottom plank. So, pre-fold other rectangles in the same way, so that you have 4 pre-folded rectangles for all the planks.



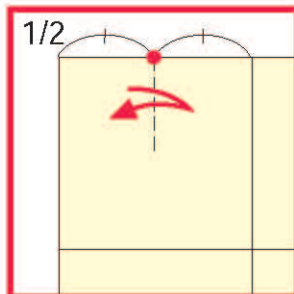
5

4

Valley fold the right- and left-hand sides being guided by the intersections of fold-marks with the top and bottom edge as shown. Press the folds flat and unfold them.

Top / Bottom Plank

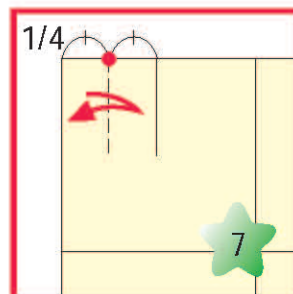
5 Working with the pre-folded rectangle, place it as shown. The upper left-hand corner marked on the image will be enlarged in the next step.



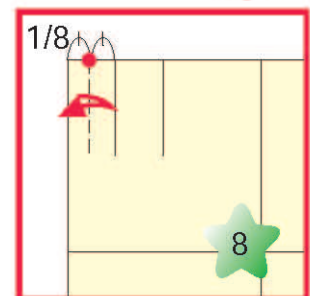
6

Working with the side square, limited by fold-lines, valley fold it in half, making a fold-mark on the upper edge, and unfold it.

Make another fold-mark, determining 1/4 of the upper edge of this square.



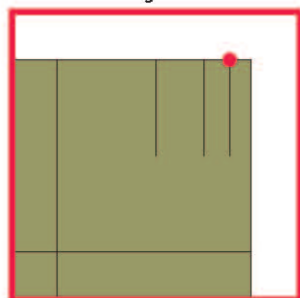
7



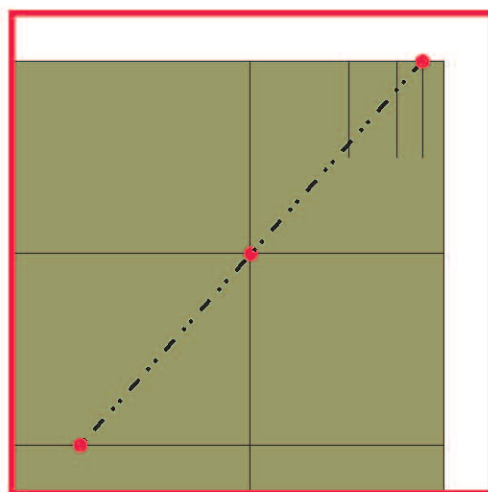
8

And make one more fold-mark, determining 1/8 of the upper edge of this square as shown. Then turn the paper over from side to side.

This should be the result. Now we'll work with this '1/8' fold-mark made in step 8 and marked by the dot here.



9



10

Pinching the paper at the '1/8' fold-mark, make the straight 'mountain' fold-line connecting the marked dots, so that it goes from the '1/8' fold-mark, through the intersections of fold-lines and touches the second horizontal fold-line, as shown by the dots. Try to be as precise as possible, as it will effect the resulting design.

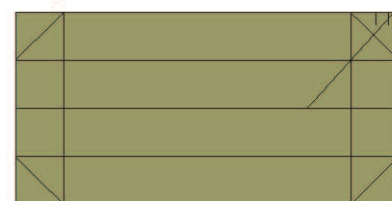
Now we will reflect the diagonal folds of the upper half of the rectangle onto the lower half. For this, shape the paper along the fold-lined marked in the previous step, thereby bringing it into the position shown in the next step and projecting the diagonal fold-lines onto the other half of the folded paper.

This should be the result. Now form the existing fold-lines into 'mountains' and 'valleys' as shown.

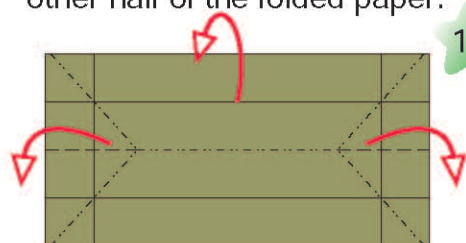
12



11



This should be the result. Now repeat steps 6 to 10 for the other side, only as in mirror. Again the fold-line should be as precise as possible.

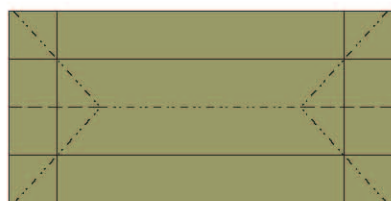


13



14

This should be the result. Make the folds flat and then, unfold the paper completely.



15

This should be the result.

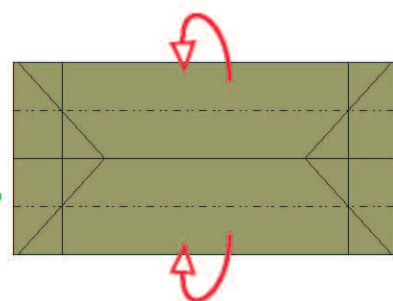
Re-fold the middle part of the vertical fold-lines into 'valleys' as shown.

16



Now mountain fold the upper and lower horizontal sections back.

17



Separating the front layer from the back layers at sides, insert your fingers into the side flaps and gently move them toward each other to shape the paper along the existing fold-lines into the position shown in the next step.



18



19

This should be the result.

Note that there are two layers at the bottom and sides, so that you will see the slits from the back side of the plank which we will position to be on the back of the frame, when time comes.



20

In this way there should be formed the top plank and the bottom plank.



21

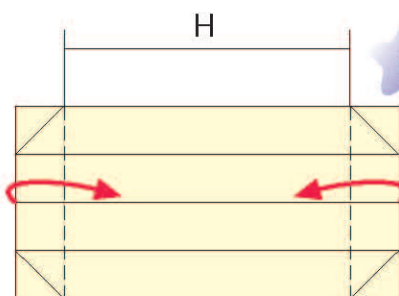
Bottom Plank



Top Plank

If you are going to integrate a piece of line into the frame for hanging, then in this step, working with the bottom plank, insert the piece of line into it as shown.

Side Plank

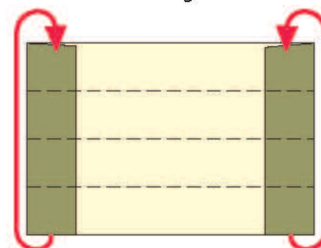


5

Working with the pre-folded rectangle, place it as shown.

The distance in the middle (H) will be the height of the future frame, which is equal to the width (W) since we fold a square frame.

Along the existing fold-lines, valley fold the horizontal sections up, inserting the bottom one between the layers of the upper section.

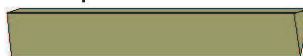


6

Valley fold the right- and left-hand sides along the existing fold-lines, as shown.

This should be the result. The side plank is ready for the assembling. Make another one like this, so that you have 2 side planks.

7



Square Frame Assembly

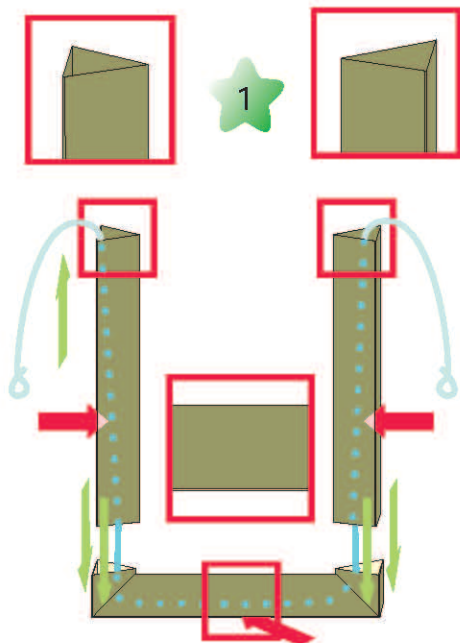
Get ready the bottom plank, the top plank and 2 side planks.

Place the bottom plank by the back side toward you, where there is a slit at the bottom and sides.

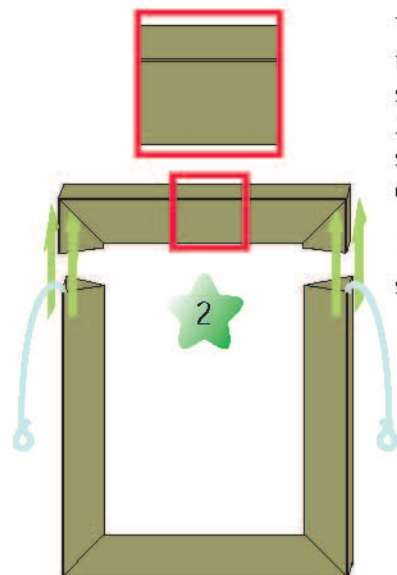
Take the side planks and also locate them by the double-layered side toward you, where there is a slit on the outer side as shown.

If you are to integrate a piece of line into the frame for hanging purposes, then pass the ends of line through the side planks as shown (it might be easier to do, if you turn the construction over for this).

Consistently insert each side plank, sliding it down carefully between the layers of the bottom plank as shown.

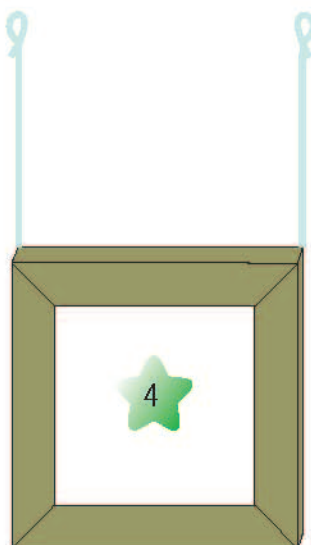


1

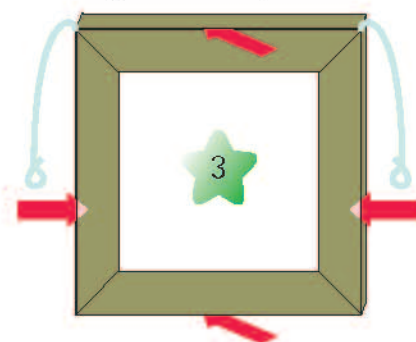


This should be the result. Now take the top plank by its back side with the slit and place it atop the side planks. Step-by-step, insert each side plank, sliding it carefully between the layers of the top plank as shown.

Keep the ends of lines at the sides as shown.



This should be the result. Be sure that you assembled all the planks correctly, so that there is a slit along the outer perimeter of the frame for inserting the back piece.

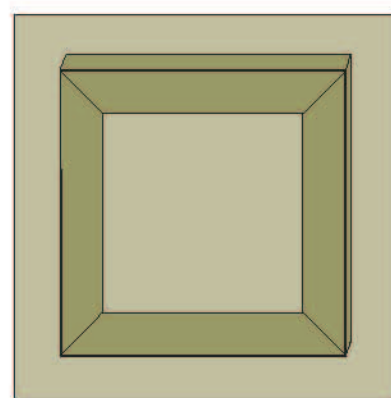


The frame is almost ready! Now we just need to add the back piece.



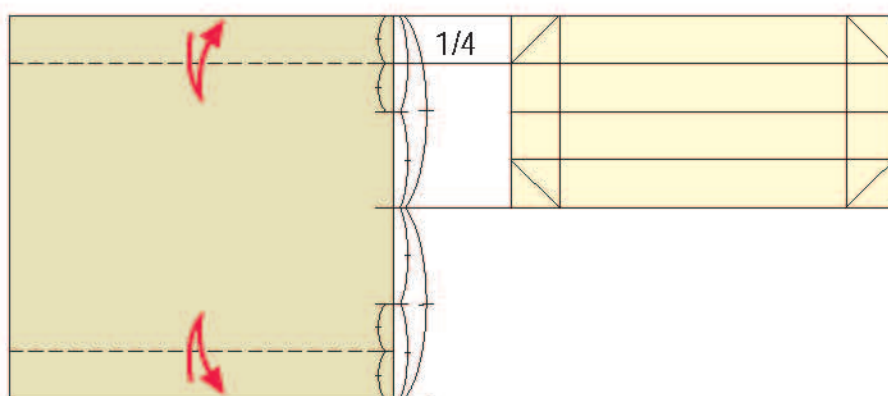
Back Piece

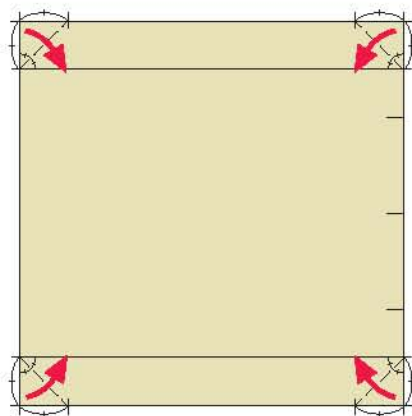
Take a square of paper for the background (it should be the 3rd of the prepared squares).



1

Valley fold the top edge of the square exactly $\frac{1}{4}$ of the short side of the rectangle used for planks as shown. In this case, since we used half-squares for planks, it will be $\frac{1}{8}$ of the side of the square. Repeat for the bottom edge.



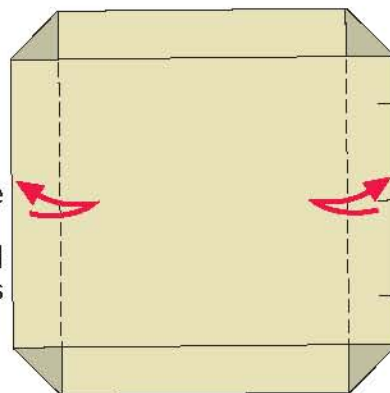


Valley fold the corners along the adjacent fold-lines as shown.

2

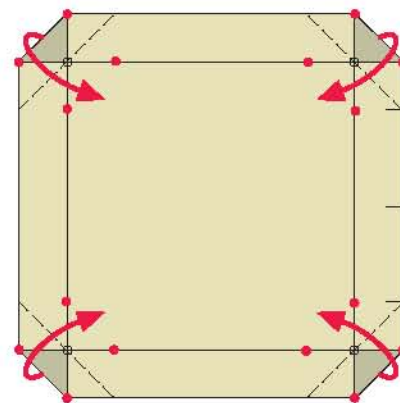
Being guided by the folded small triangular flaps, valley fold and unfold the side edges as shown.

3

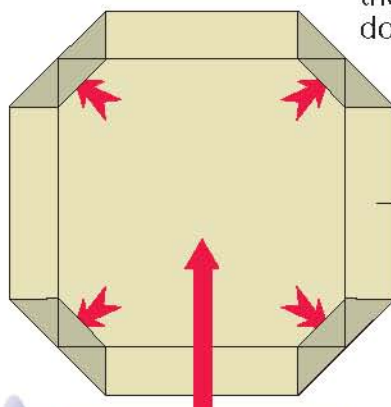


Now working consistently with each corner area of the square, fold the sloping edge over the intersection of the fold-lines, so that the dots coincide.

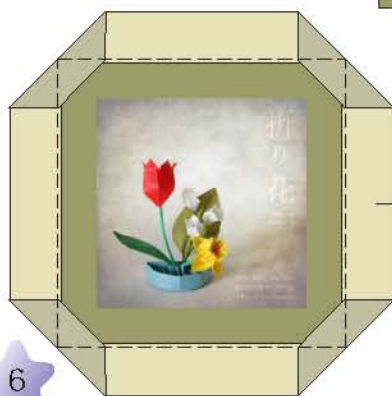
4



This should be the result. In this point you may insert the picture into the inner area, inserting the corners into the pockets as shown. Note that the certain margin along the perimeter on the picture piece will be hidden by the frame itself, so consider it when planning the size of the picture.



5



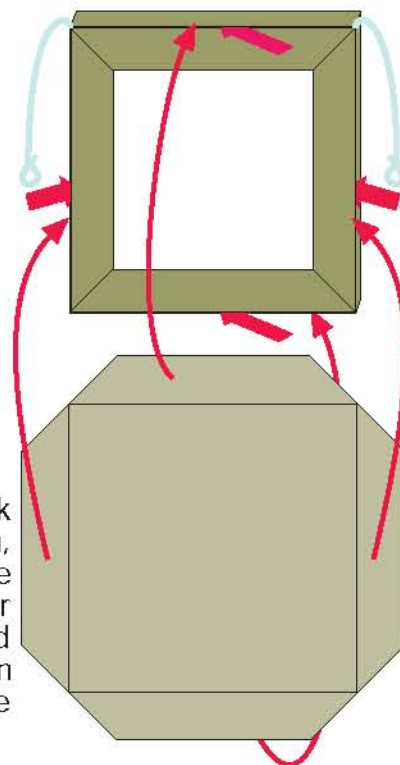
6

When the piece with the picture is inserted, valley fold the flaps along the existing fold-lines as shown, thereby preparing them for inserting into the frame. Then turn it over, from side to side.

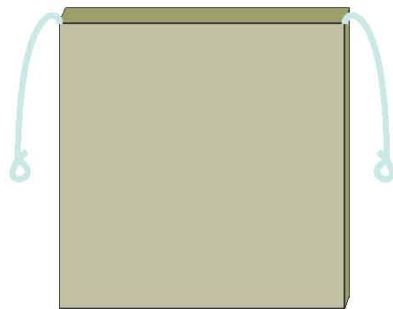


7

Take the frame by its back side toward you, as shown, and consistently insert the flaps of the back piece, for instance first the left-hand flap, then top and bottom flaps and finally the right-hand flap.



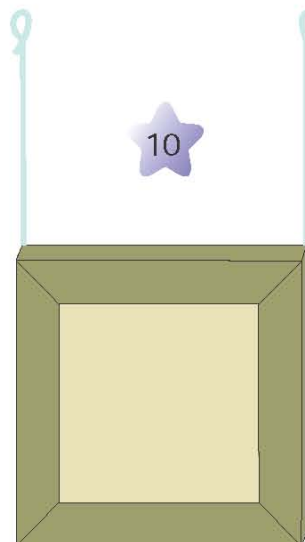
This should be the result. Turn the frame over.



8



9



10

Here is the completed Slim Square Shadowbox Frame with the equilateral triangle profile.

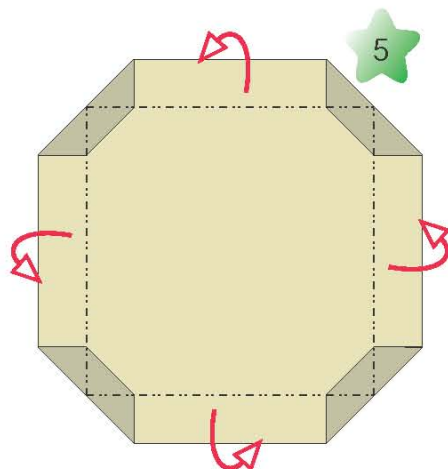


Now you may display pictures and small artworks in such elegant origami frames!



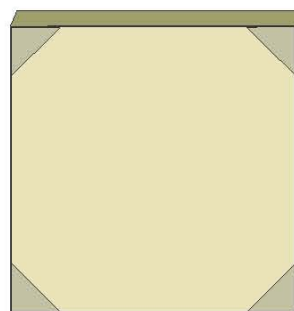
Alternative Back Piece

If in step 5 you will fold the flaps back, as shown, and insert them into the frame, then the backside will have the triangular pockets.



5

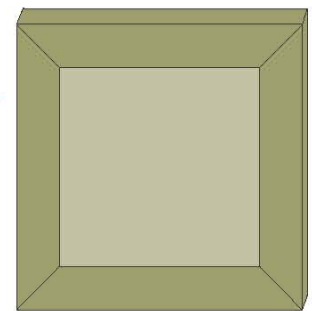
6



This should be the resulted backside. The little triangular pockets can be used for hanging.

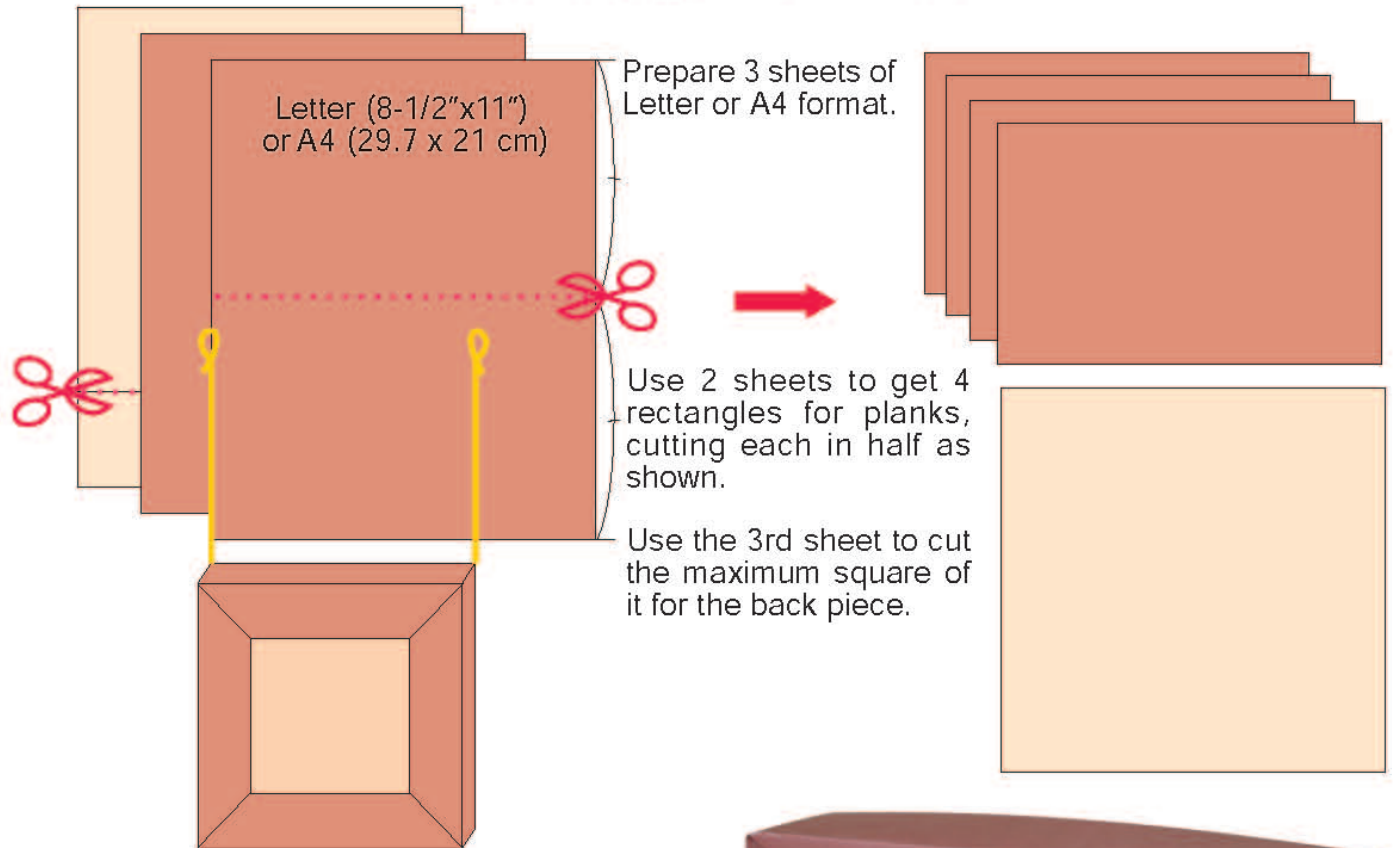


7



Here is the completed Slim Square Shadowbox Frame with the equilateral triangle profile.

Middle Square Frame



When using sheets of Letter format (11 x 8-1/2 inches), it will result in a 5-3/4-inch square frame with a 3-1/2-inch square picture space, and frame's depth as 1-3/8 inch.



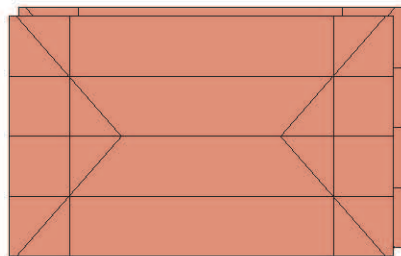
*Middle Square Frame with
a photo (folded from A4
format paper)*



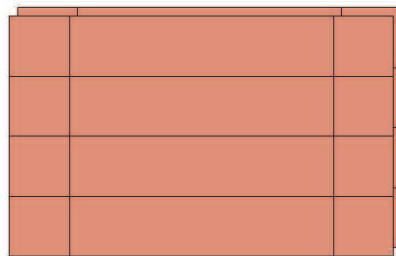
*Middle Square Frame with a
photo (folded from Letter
format paper)*

When using sheets of A4 format (29.7 x 21 cm), it will result in a 14-cm square frame with a 7.5-cm square picture space, and frame's depth as 3.7 cm.

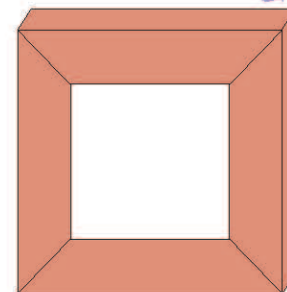
Top / Bottom Planks



Side Planks



Assembly

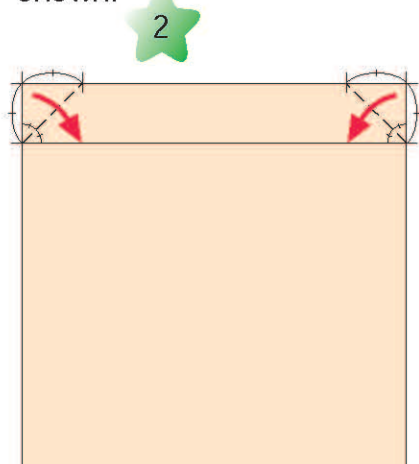


Fold top, bottom and side planks and then assemble them into a frame in the same way as shown for the Slim Square Frame on pages 2 to 5 of this article (book pages 54 to 57).

Back Piece

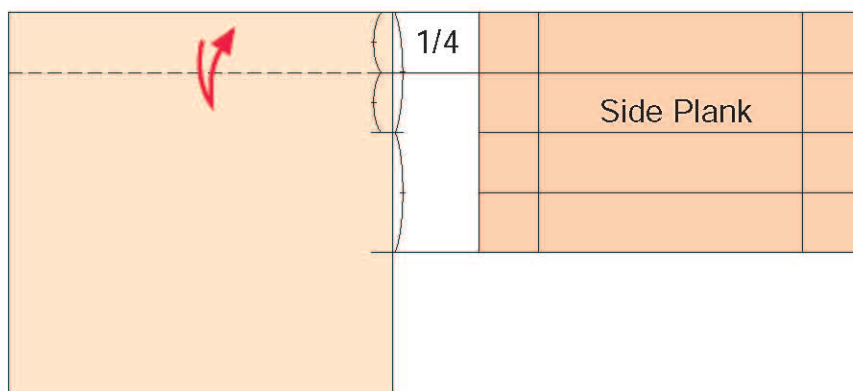
Take a square of paper for the background (it should be made out of the 3rd of the prepared sheets).

Valley fold the upper corners along the adjacent fold-lines as shown.

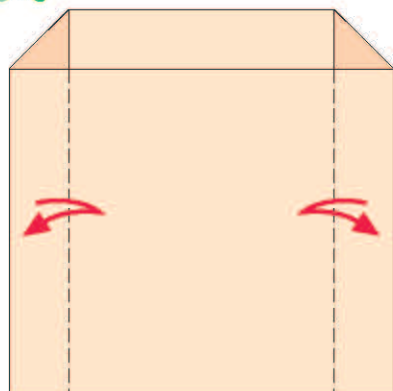


1

Valley fold the top edge of the square exactly $\frac{1}{4}$ of the short side of the rectangle used for planks as shown. Press the fold flat and unfold it.



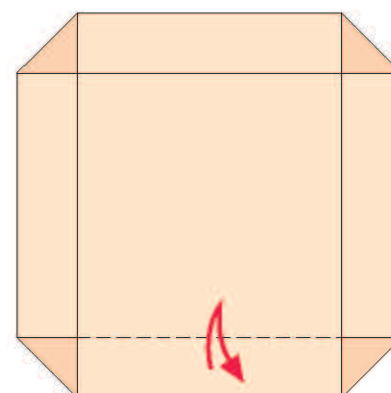
3



Being guided by the folded small triangular flaps, valley fold and unfold the side edges as shown.

4

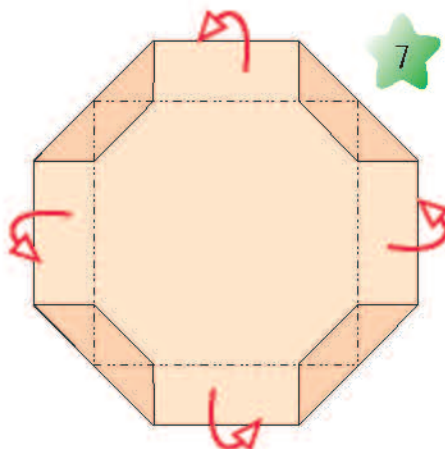
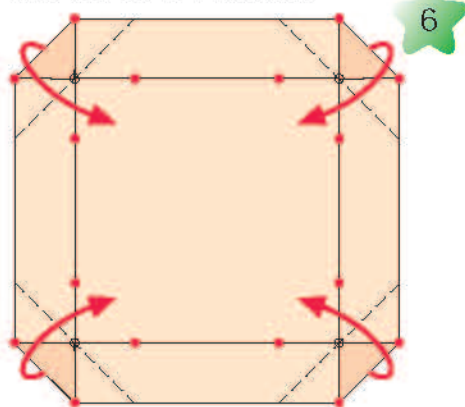
Valley fold the lower corners along the adjacent fold-lines as shown.



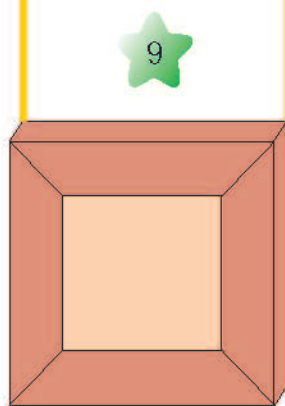
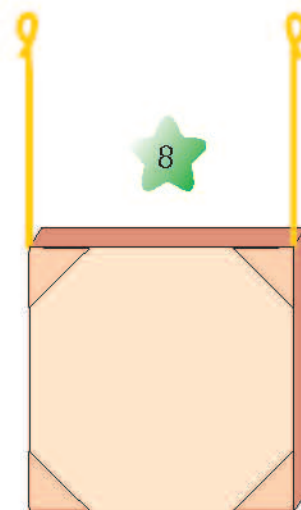
5

Being guided by the lower small triangular flaps, valley fold and unfold the bottom edge as shown.

Now working consistently with each corner area of the square, fold the sloping edge over the intersection of the fold-lines, so that the dots coincide.



This should be the result. In this point you may insert the picture into the inner area or use an alternative way for the back piece, folding the flaps back, as shown, and inserting them into the frame's slits.



This should be the resulted backside. The little triangular pockets can be used for hanging alternatively to a piece of line.

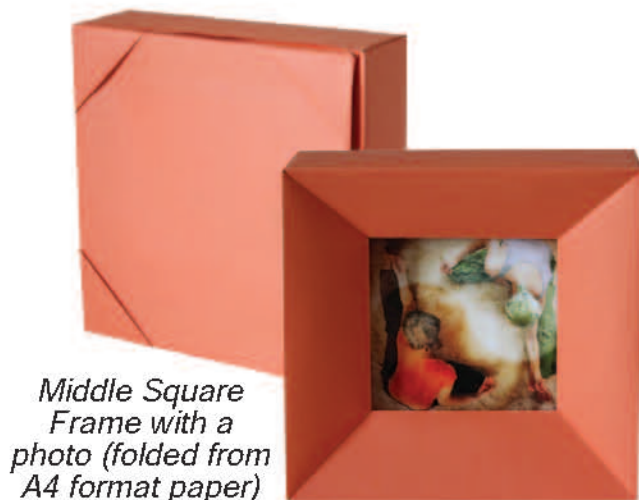
Here is the completed Middle Square Shadowbox Frame with the equilateral triangle profile.



Middle Square Frame with a photo (folded from Letter format paper)



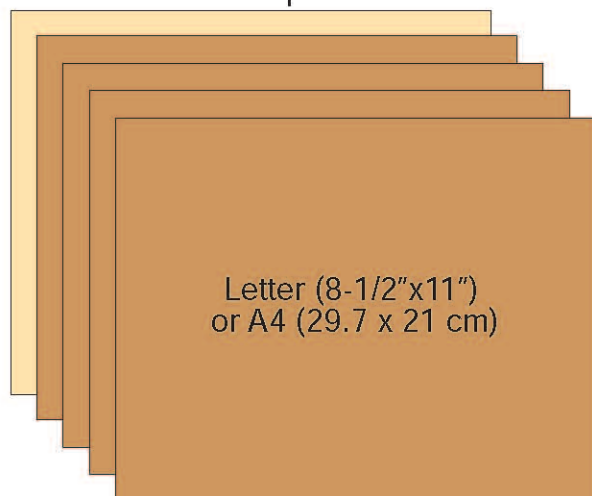
Middle Square Frame with a photo (folded from Letter format paper)



Middle Square Frame with a photo (folded from A4 format paper)

Tabby Square Frame

You will need 5 sheets of Letter or A4 format, 4 of which will be used for planks and 1 sheet for the back piece.

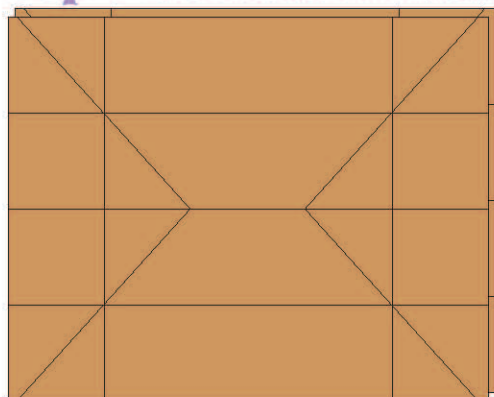


Tabby Square Frame (folded from Letter format paper)

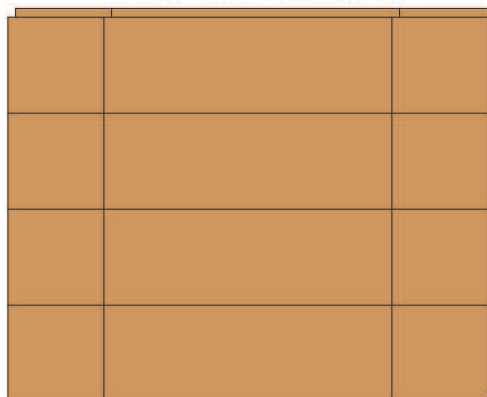
When using sheets of A4 format (29.7 x 21 cm), it will result in a 19-cm square frame with a 8.5-cm square picture space, and frame's depth as 5.3 cm.

When using sheets of Letter format (11 x 8-1/2 inches), it will result in a 6-3/4-inch square frame with a 3-inch square picture space, and frame's depth as 2-1/8 inch.

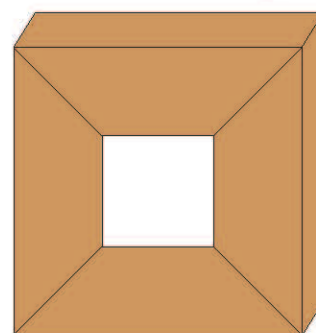
Top / Bottom Planks



Side Planks



Assembly



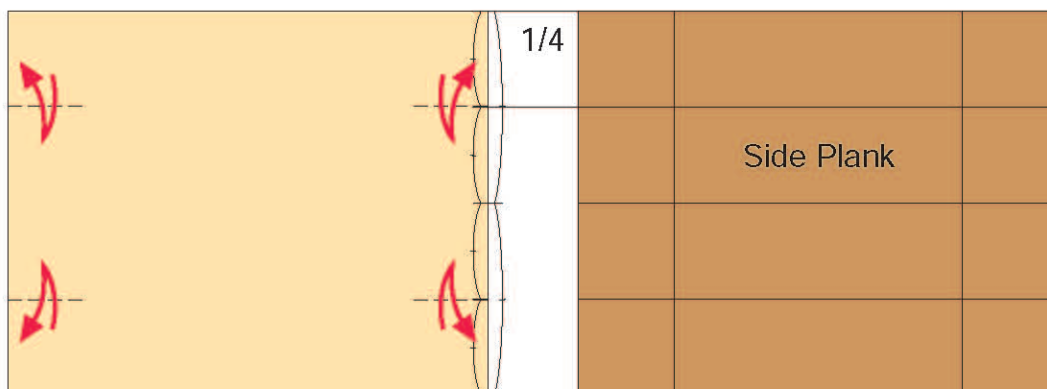
Use 4 sheets to fold top, bottom and side planks and then assemble them into a frame in the same way as shown for the Slim Square Frame on pages 2 to 5 of this article (book pages 54 to 57).

Back Piece

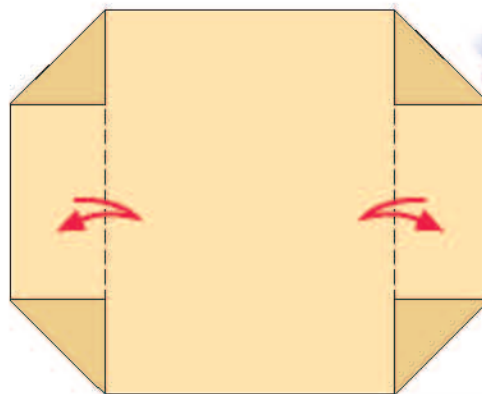
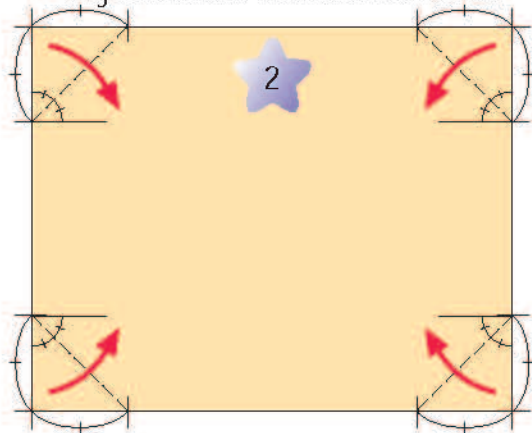
Use the 5th sheet for the back piece.



By valley folding, make the fold-marks on sides that are located exactly 1/4 of the short side of the rectangle from the top and bottom as shown.



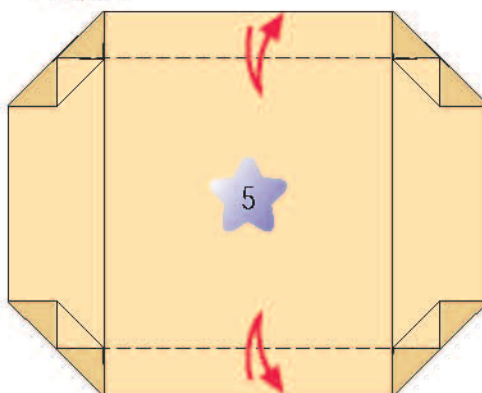
Valley fold the corners along the adjacent fold-marks as shown.



3

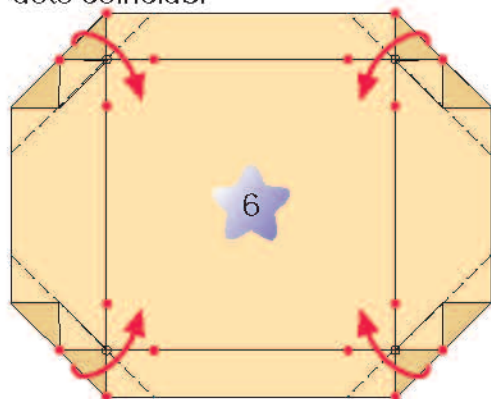
Being guided by the folded triangular flaps, valley fold and unfold the side edges as shown.

Being guided by the folded small triangular flaps, made in the previous step, valley fold and unfold the top and bottom edges as shown.



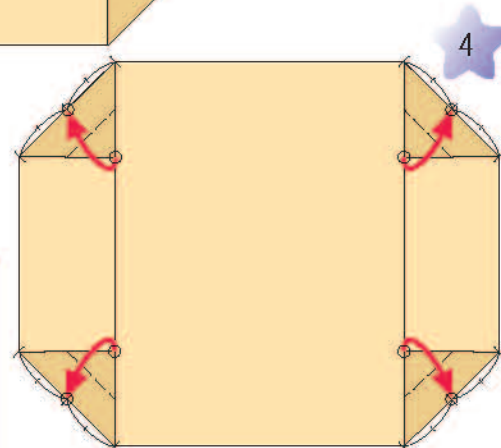
5

Now working consistently with each corner area of the square, fold the sloping edge over the intersection of the fold-lines, so that the dots coincide.



6

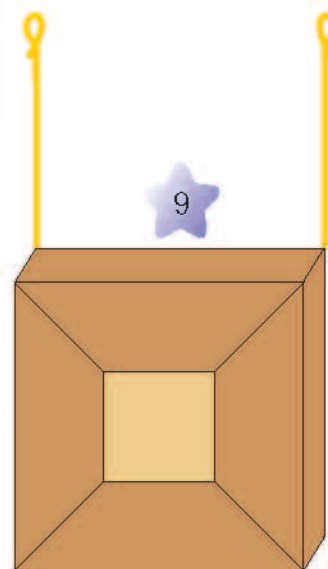
Working with triangular flaps, on each of them, fold the corner to meet the middle of the opposite side, as shown.



4

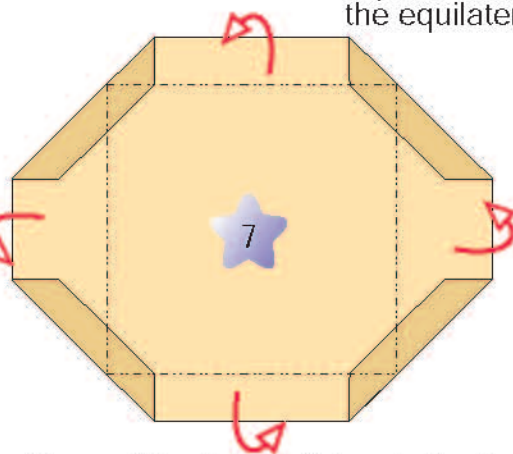


Here is the completed Tubby Square Shadowbox Frame with the equilateral triangle profile.

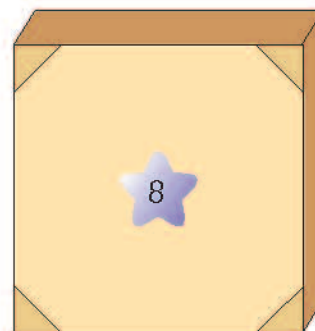


9

This should be the result. In this point you may insert the picture into the inner area or use an alternative way for the back peace, folding the flaps back, as shown, and inserting them into the frame.



7



8

This should be the resulted backside. The little triangular pockets can be used for hanging alternatively to a piece of line.

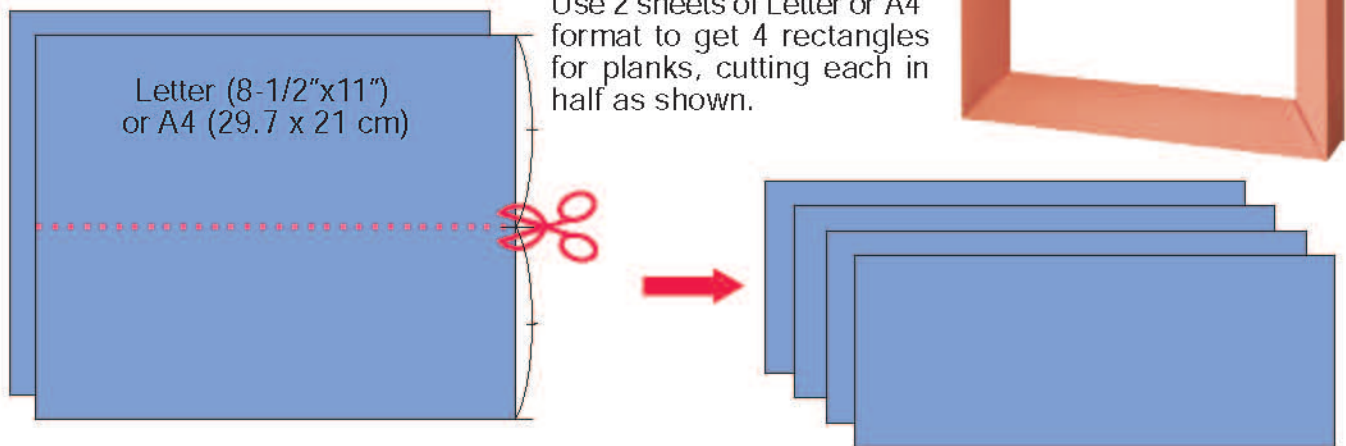
Slim Large Rectangular Frame

Using the same principle of folding of this frame with the equilateral triangle profile, you may do various rectangular frames with a custom size.

For instance, using sheets of Letter or A4 format, you may receive the maximum size of the rectangular frame that will even exceed the original sheet of Letter or A4 format. In this case for the back piece you will need to find the bigger sheet to cover the whole frame.

When using sheets of Letter format (11 x 8-1/2 inches), it will result in a 11 x 8-3/4 inches frame with a 9-1/4 x 7 inches picture space, and frame's depth as 1-1/8 inch.

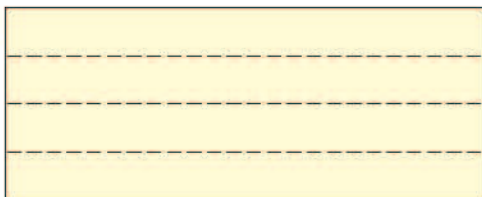
When using sheets of A4 format (29.7 x 21 cm), it will result in a 29.7 x 24.5 cm frame with a 25.2 x 20 cm picture space, and frame's depth as 2.6 cm.



Side Planks

As for the side planks, in order to use the full length of the rectangle, follow just 2 first step of the plank pre-folding to have the rectangle divided on 4 equal horizontal sections as shown.

3



4

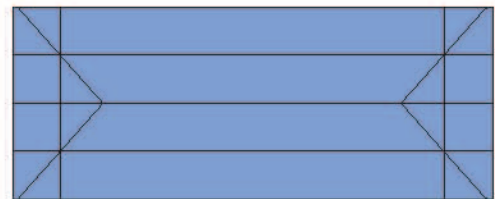


Then fold the paper along the fold-lines into a tube with the equilateral triangle profile. The side plank in this case will be not locked itself, but it will be locked during the frame assembly.



Top / Bottom Planks

Fold the top and bottom planks in the same way as shown for the Slim Square Frame on pages 2 to 4 of this article (book pages 54 to 56).

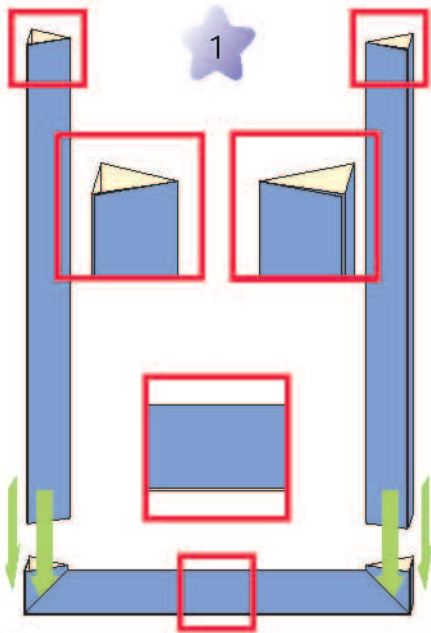


5

This should be the result The side plank is ready for the assembling. Make another one like this, so that you have 2 side planks.

Rectangular Frame Assembly

Get ready the bottom plank, the top plank and 2 side planks.

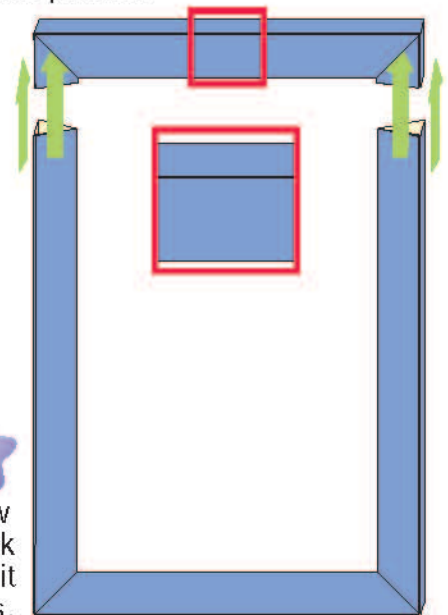


1

Place the bottom plank by the back side toward you, where there is a slit at the bottom and sides.

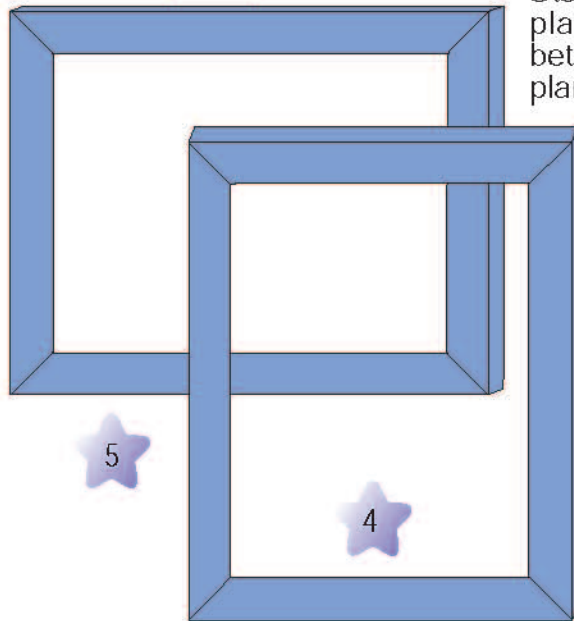
Take the side planks and also locate them by the double-layered side toward you, where there is a slit on the outer side as shown.

Consistently insert each side plank, sliding it down carefully between the layers of the bottom plank as shown.



2

This should be the result. Now take the top plank by its back side with the slit and place it atop the side planks. Step-by-step, insert each side plank, sliding it carefully between the layers of the top plank as shown.



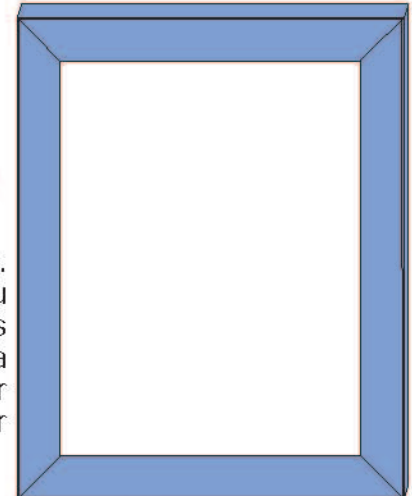
5

4



3

This should be the result. Be sure that you assembled all the planks correctly, so that there is a slit along the outer perimeter of the frame for inserting the back piece.



Here is the completed Rectangular Shadowbox Frame with the equilateral triangle profile.

To make a customized back piece for this frame, follow suggestions in the article 'Back Piece' (book pages 123 to 126).

Congratulations!

Now you may fold various shapes & sizes of shadowbox frames with the equilateral triangle profile. This frame is perfect for displaying images and artworks. Enjoy!

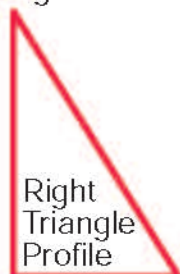




Shadowbox Frame (Right Triangle Profile)

by Yuri Shumakov

This is an elegant design of a shadowbox frame with the right triangle profile that creates an inviting display for an image. Folds from 4 modules and can be folded into a square or rectangular frame. It's good for displaying pictures and small artworks.



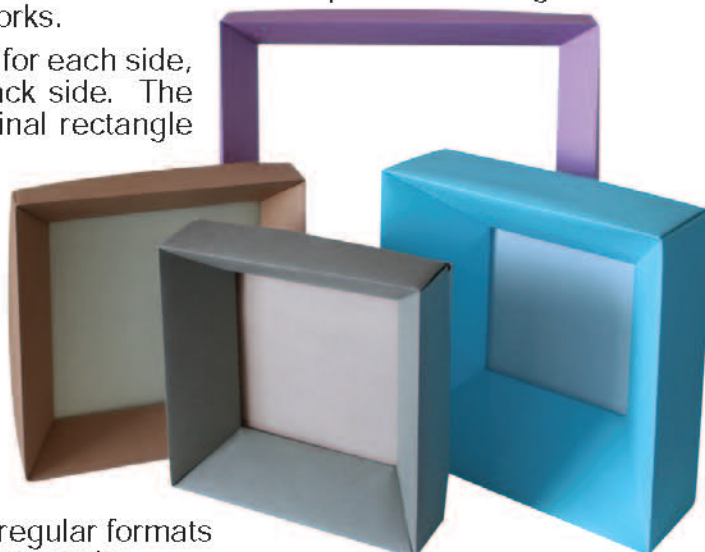
You will need 4 rectangles, one for each side, and 1 piece of paper for the back side. The various proportions of the original rectangle will result in different variations of the frame - shallow slim, middle, and deep tubby. Also, optionally, for a hanger prepare a piece of line or thread

that in length is a bit longer than the frame's perimeter. Fishing line works well for it. The line can be integrated into the frame during folding in the same manner as it's shown in the article 'Deep Shadowbox Frame (1:2 Rectangle Profile, 4 modules)'.

Suggested sizes: You may use rectangles of regular formats of A4 (29.7x21 cm) or Letter (11x8.5 inches) for practice.

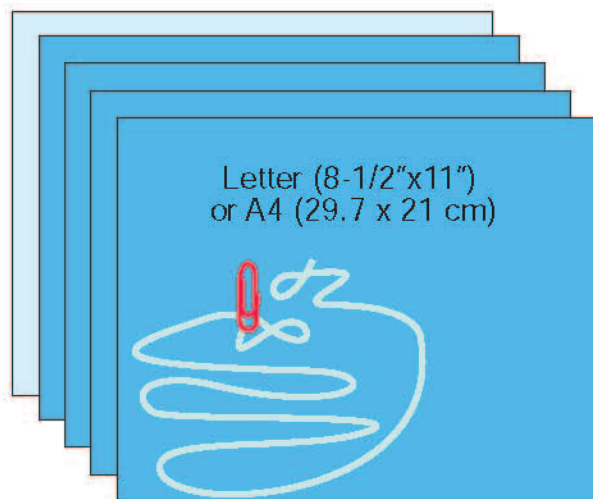
Suggested paper: Paper should be strong and relatively thick. Copy paper works quite well. You may use various craft paper as well.

Suggested colours: It can be any colour you wish. It's good to use a lighter shade for the background, when the frame is meant for displaying little objects.

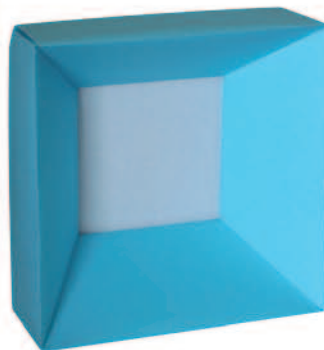


Deep Tubby Frame

Prepare 5 sheets of Letter or A4 format, 4 of which will be used for planks and 1 for the back piece.

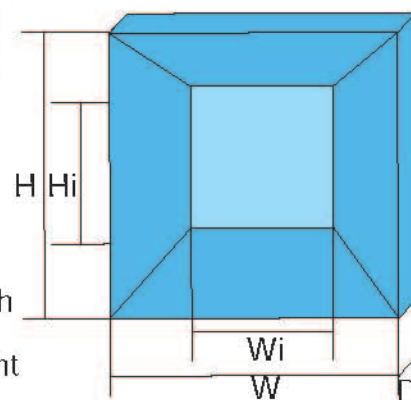


When using sheets of Letter format (11 x 8-1/2 inches), it will result in a 6-3/4-inch square frame with 3-1/2-inch square picture space, and frame's depth as 2-1/8 inch.



When using sheets of A4 format (29.7 x 21 cm), it will result in a 19-cm square frame with 11-cm square picture space, and frame's depth as 5.3 cm.

W - width
Wi - picture, width
H - height
Hi - picture, height
D - depth



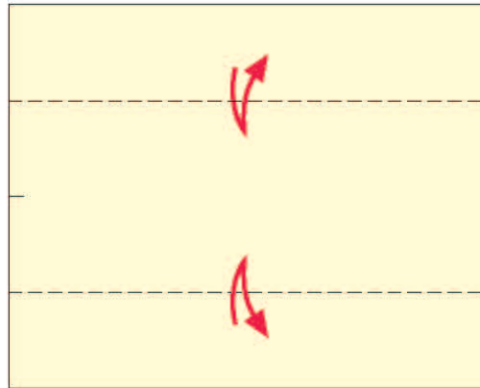
Plank Pre-Folding

If using two-colour paper, begin with coloured side down.

Place your rectangle longwise, coloured side down, as shown. Valley fold it in half from bottom to top. But do not press it completely flat, just making the small fold-marks on the sides, as shown.



1



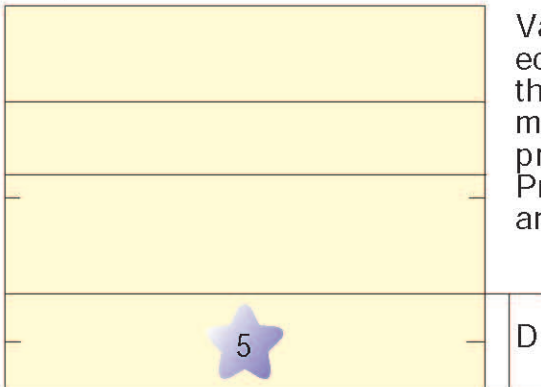
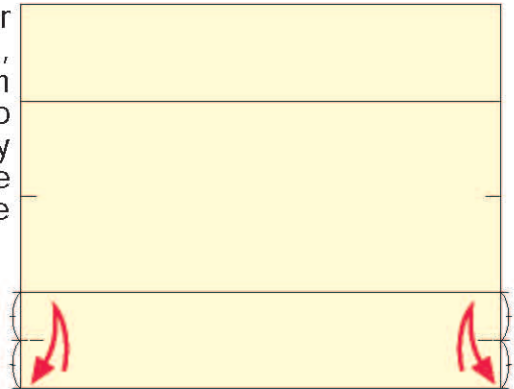
Valley fold the bottom and top edges to meet the horizontal middle fold-marks. Press them flat and unfold them.

2

Now we have a pre-folded paper for a frame plank, no matter it's a side, top or bottom plank. So, pre-fold other rectangles in the same way to have 4 pre-folded rectangles for all the planks.

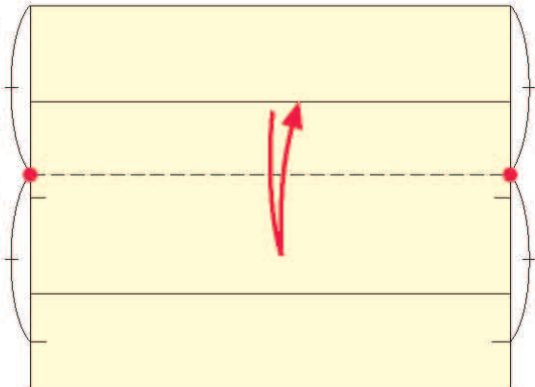
Working with the lower horizontal section, valley fold it in half from bottom to top. But do not press it completely flat, just making the small fold-marks on the sides, as shown.

3



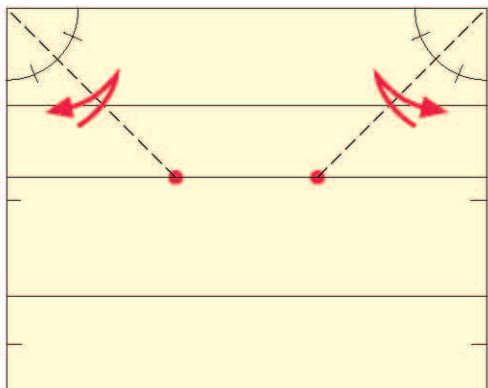
Valley fold the top edge down to meet the fold-marks made in the previous step. Press the fold flat and unfold it.

4



Top / Bottom Plank

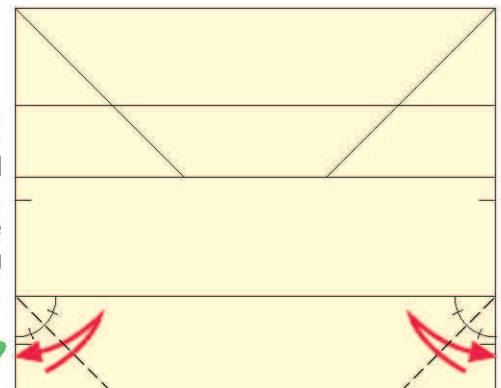
Working with the pre-folded rectangle, place it as shown. Consistently valley fold each upper corner in half as shown, so that the diagonal fold-line is limited by two horizontal sections.

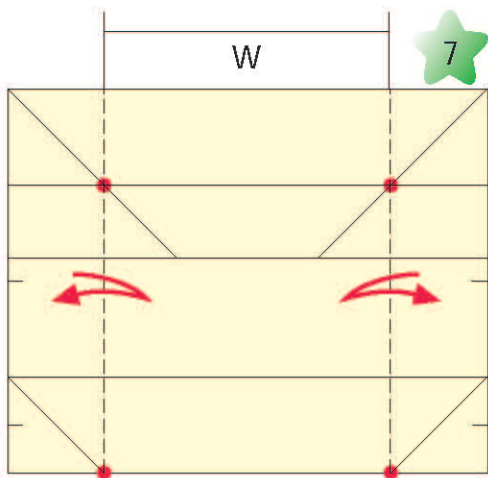


5

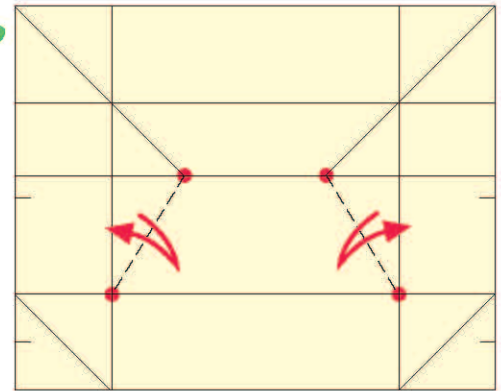
Valley fold and unfold the lower corners along the adjacent fold-lines, thereby making the diagonal fold-marks on the lower horizontal sections.

6



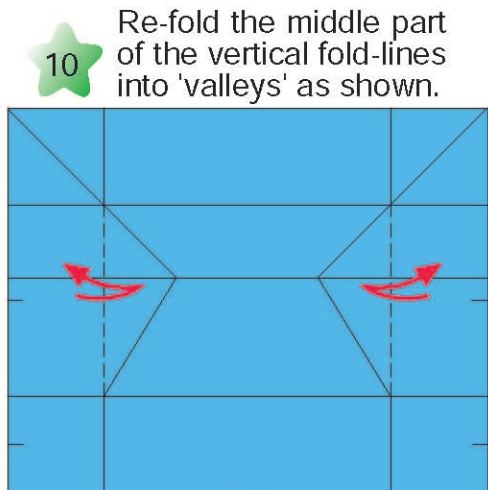


7 Valley fold the right- and left-hand sides being guided by the intersections of the fold-marks and the bottom edge as well as by the intersections of the upper diagonal fold-marks and the upper horizontal fold-line, as shown. Press the folds flat and unfold them. Now the resulted distance in the middle (W) will be the width of the future frame.

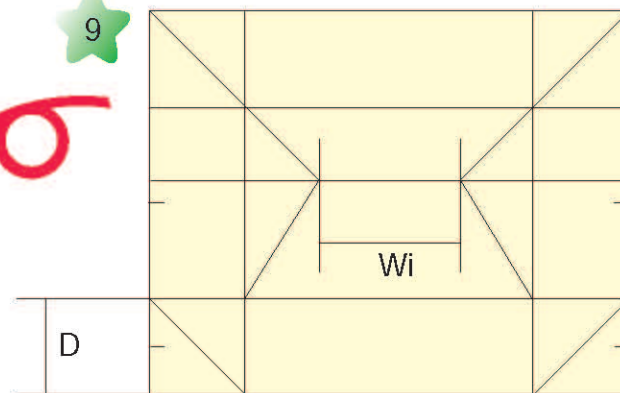


8 Now make the limited fold-lines between the marked intersections.

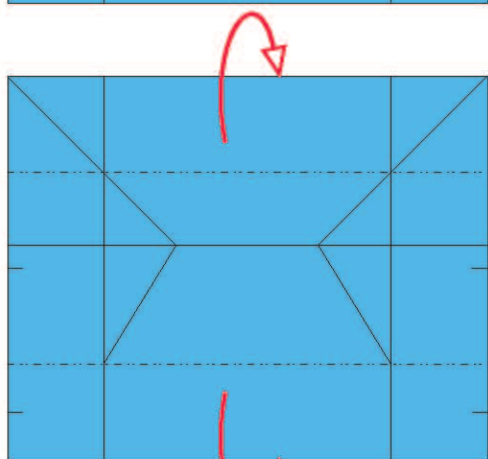
This should be the result. Turn the paper over, from side to side.



10 Re-fold the middle part of the vertical fold-lines into 'valleys' as shown.



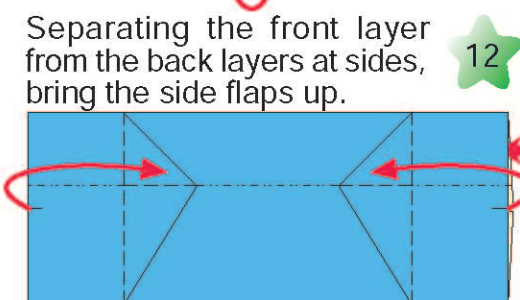
9



11

Mountain fold the upper and lower horizontal sections back.

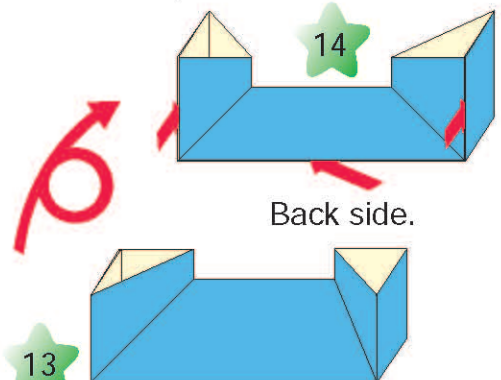
Note that there are two layers at the bottom and sides, so that you will see the slits from the back side of the plank which will be positioned to be on the back of the frame, when time comes.



Separating the front layer from the back layers at sides, bring the side flaps up.

12

Insert your hands into the side flaps and gently move hands toward each other to shape the paper along the existing fold-lines into the position shown in the next step.



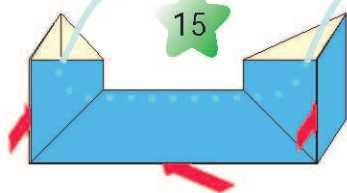
14

Back side.

13

This should be the result.

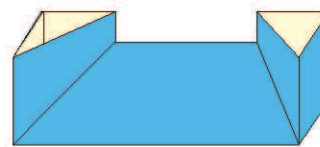
Bottom Plank



If you are going to integrate a piece of line into the frame for hanging, then in this step, working with the bottom plank, insert the piece of line into it as shown.

Top Plank

16

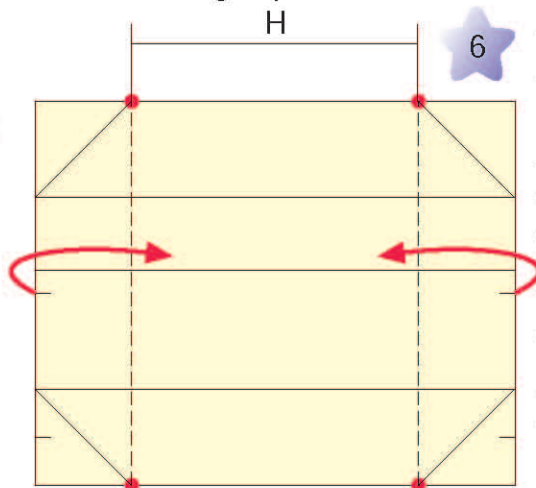
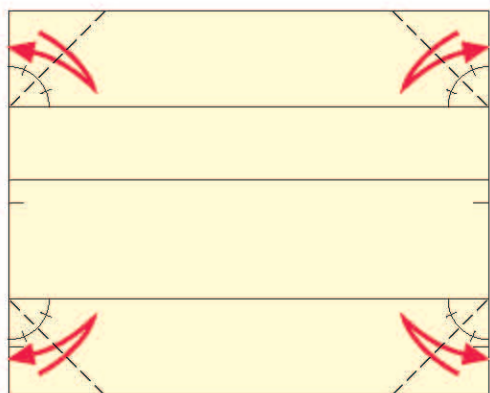


In this way there should be formed the top plank and the bottom plank.

Side Plank

Working with the pre-folded rectangle, place it as shown.

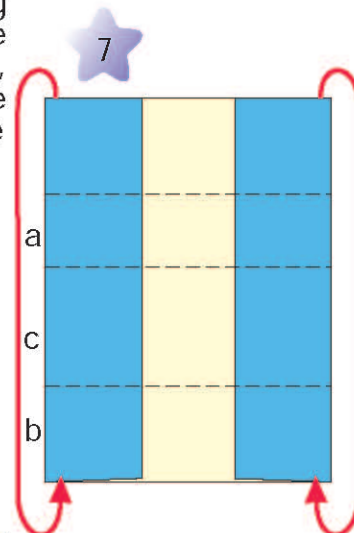
Valley fold and unfold the corners along the adjacent fold-lines, thereby making the diagonal fold-marks on the upper and lower horizontal sections.



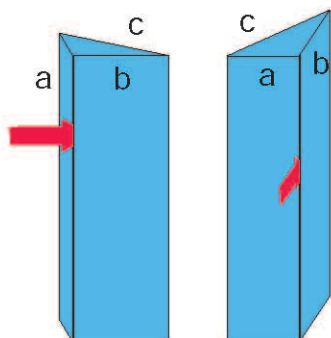
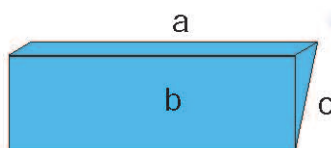
Valley fold the right- and left-hand sides being guided by the intersections of the fold-marks and the top and bottom edges.

Now the resulted distance in the middle (H) will be the height of the future frame, which is equal to the width (W) since we fold a square frame.

Along the existing fold-lines, valley fold the horizontal sections up, inserting the upper one between the layers of the bottom section.



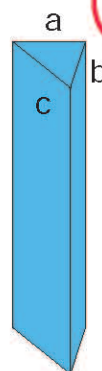
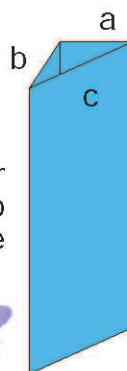
This should be the result.



Note that there are two layers at the side (b), so that you will see the slit from the back side (a) of the plank which we will position to be on the back of the frame, when time comes.

Make another one like this to have 2 side planks.

10



11

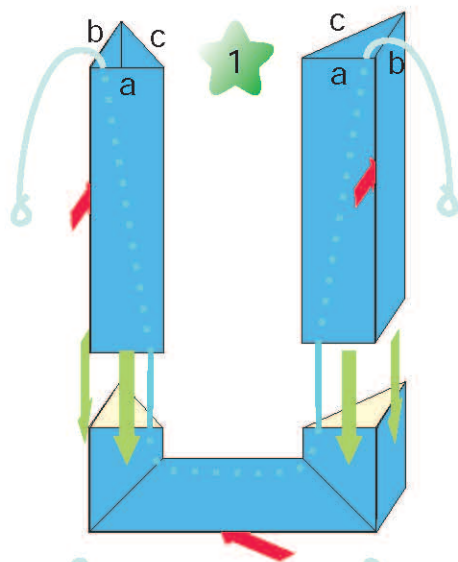
The side planks are ready for the assembling.

Square Frame Assembly

Get ready the bottom plank, the top plank and 2 side planks.

Place the bottom plank by the back side toward you, where there is a slit at the bottom and sides.

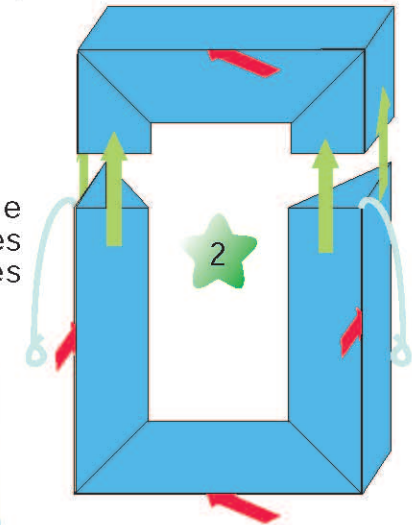
Take the side planks and also locate them by the double-layered side toward you, where there is a slit on the outer side as shown.



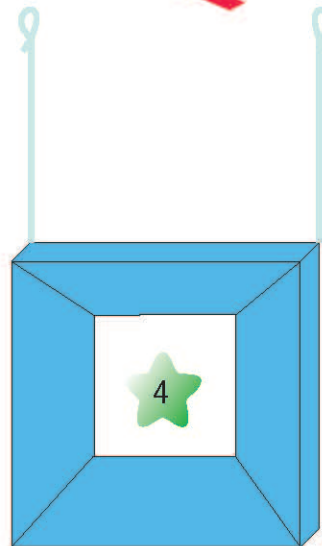
If you are to integrate a piece of line into the frame for hanging purposes, then pass the ends of line through the side planks as shown (it might be easier to do, if you turn the construction over for this).

Consistently insert each side plank, sliding it down carefully between the layers of the bottom plank as shown.

This should be the result. Now take the top plank by its back side with the slit and place it atop the side planks. Step-by-step, insert each side plank, sliding it carefully between the layers of the top plank as shown.



Keep the ends of lines at the sides as shown.



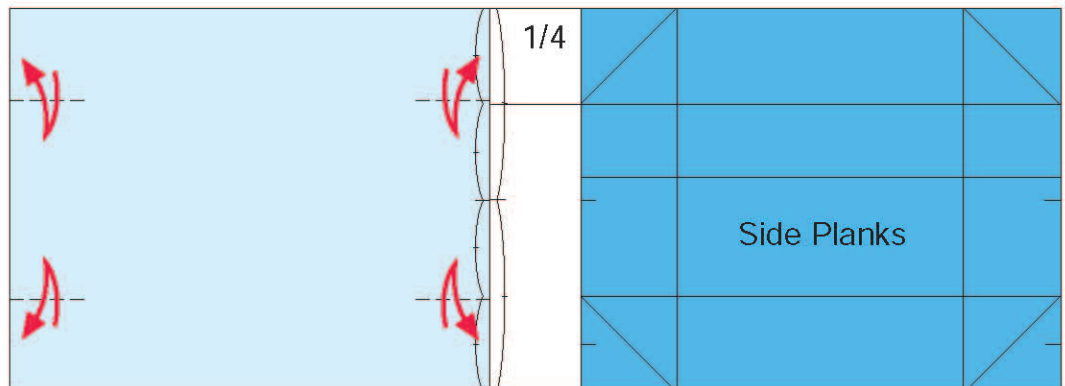
The frame is almost ready! Now we just need to add the back piece.

This should be the result. Be sure that you assembled all the planks correctly and there is a slit along the outer perimeter of the frame for inserting the back piece.

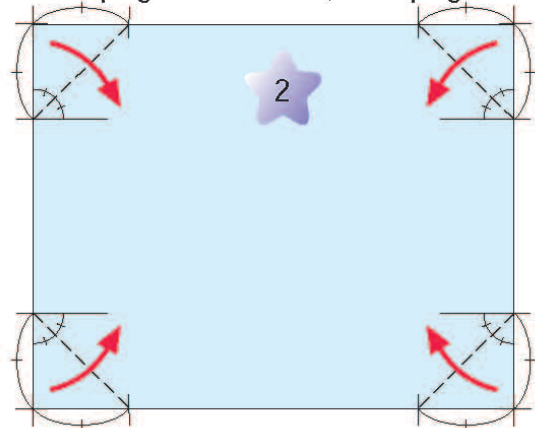
Back Piece

Use the 5th sheet for the back piece. Place the rectangle longwise.

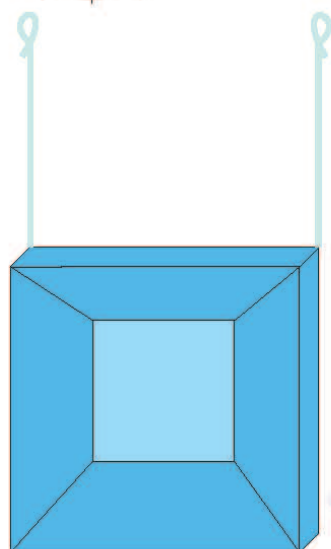
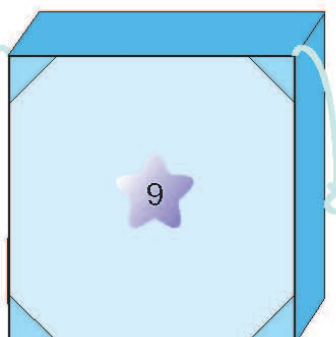
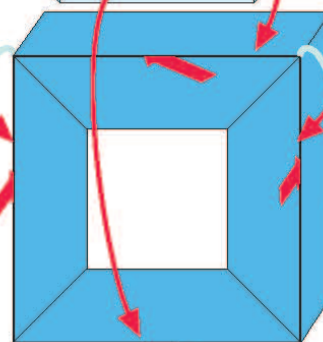
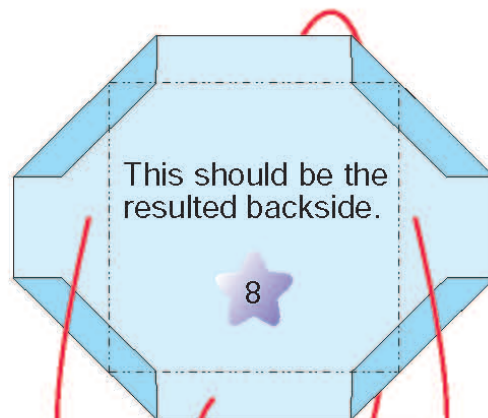
By valley folding, make the fold-marks on sides that are located exactly $\frac{1}{4}$ of the short side of the rectangle from the top and bottom as shown.



Following steps from 2 to 7 are folding in the same manner as it was shown for the back piece of the Tubby Square Frame in the article 'Shadowbox Frame (Equilateral Triangle Profile)', article pages 11 to 12 (book pages 63 to 64).



Take the frame by its back side toward you and consistently insert the flaps of the back piece into the slits of the frame.



Here is the completed Deep Tubby Square Shadowbox Frame with the right triangle profile.



*Deep Tubby Square Frame
with an origami collage
(folded from Letter format paper)*

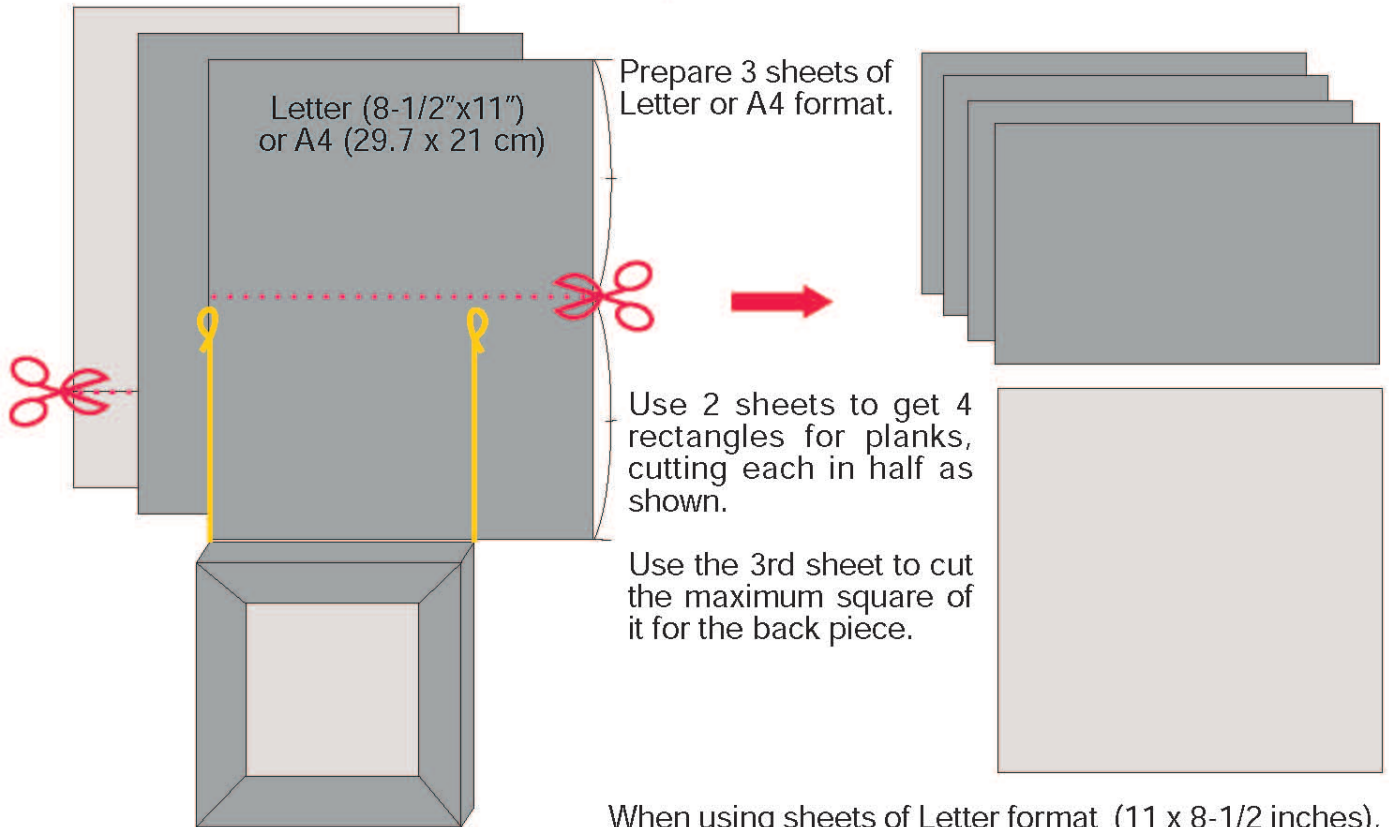


*Deep Tubby
Square Frame
(folded from Letter
format paper)*



*Deep Tubby Square
Frame with a photo (folded
from Letter format paper)*

Middle Square Frame



When using sheets of Letter format (11 x 8-1/2 inches), it will result in a 5-3/4-inch square frame with 3-2/3-inch square picture space, and frame's depth as 1-3/8 inch.

When using sheets of A4 format (29.7 x 21 cm), it will result in a 14-cm square frame with 8-cm square picture space, and frame's depth as 3.7 cm.

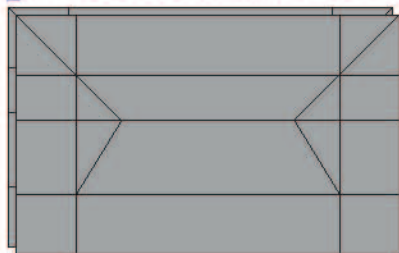


*Middle Square Frame
with an origami collage
(folded from Letter format paper)*



*Middle Square Frame with
a photo (folded from Letter
format paper)*

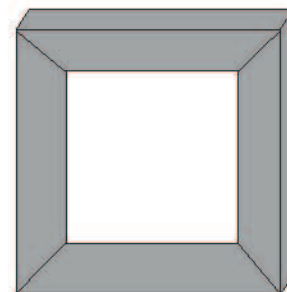
Top / Bottom Planks



Side Planks



Assembly

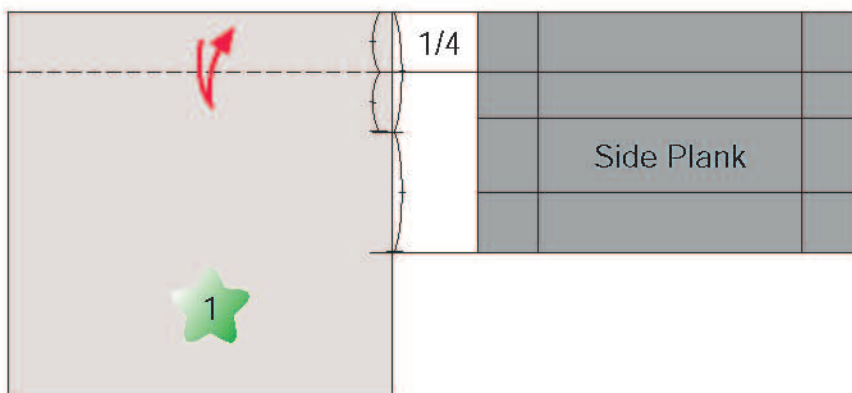
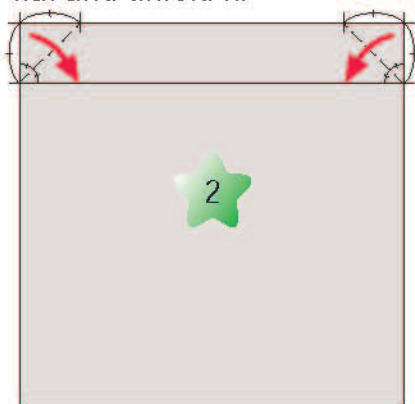


Fold top, bottom and side planks and then assemble them into a frame in the same way as shown for the Deep Tubby Square Frame on pages 2 to 5 of this article (book pages 68 to 71).

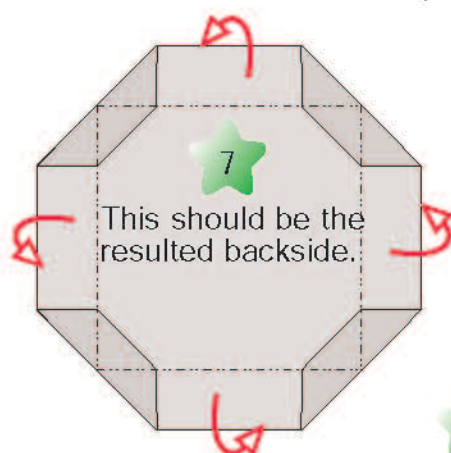
Back Piece

Take a square of paper for the background (it should be made out of the 3rd of the prepared sheets).

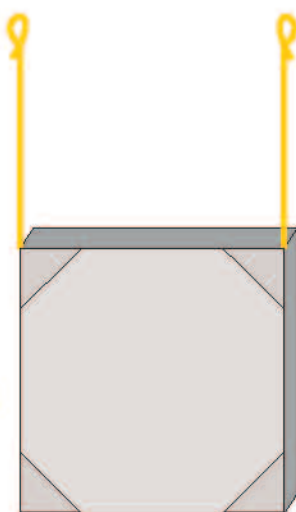
Valley fold the top edge of the square exactly $\frac{1}{4}$ of the short side of the rectangle used for planks as shown. Press the fold flat and unfold it.



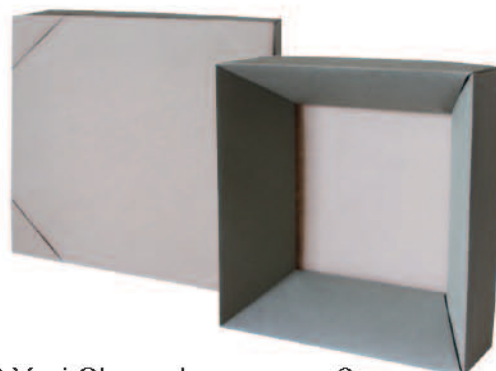
Following steps from 2 to 7 are folding in the same manner as it was shown for the back piece of the Middle Square Frame in the article 'Shadowbox Frame (Equilateral Triangle Profile)', article pages 9 to 10 (book pages 61 to 62).



Take the frame by its back side toward you and consistently insert the flaps of the back piece into the slits of the frame.

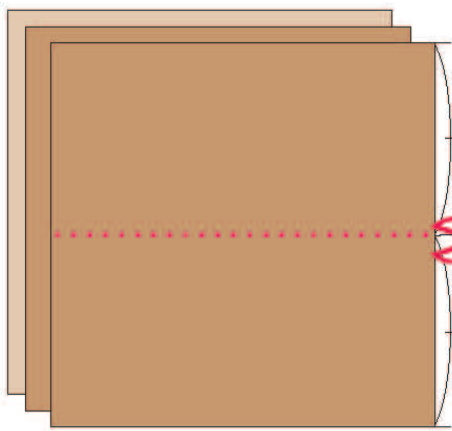


Here is the completed Middle Square Shadowbox Frame with the right triangle profile.

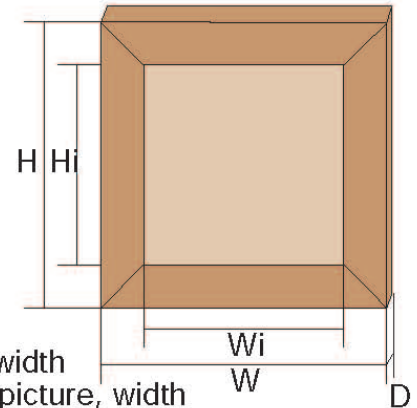


Slim Square Frame

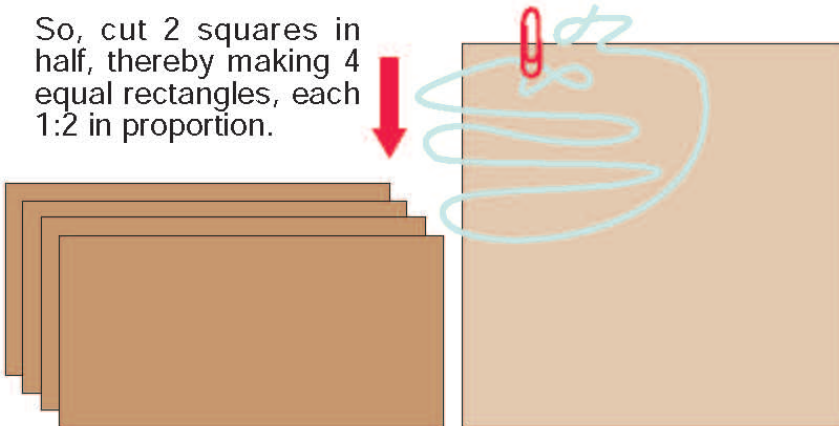
You will need 3 squares in total, 2 of which will be used to get 4 rectangles for planks and 1 square for the back piece.



When using sheets of Letter format (11 x 8-1/2 inches) to get 8-1/2 inch squares, it will result in a 6-1/2-inch square frame with a 5-inch square picture space, and frame's depth as 1 inch.



So, cut 2 squares in half, thereby making 4 equal rectangles, each 1:2 in proportion.



W - width
Wi - picture, width
H - height
Hi - picture, height
D - depth

When using sheets of A4 format (29.7 x 21 cm) to get 21-cm squares, it will result in about a 15.75-cm square frame with a 13-cm square picture space, and frame's depth as 2.6 cm.



Slim Square Frame



Slim Square Frame

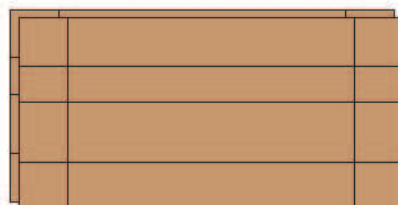


*Slim Square Frame
with a photo*

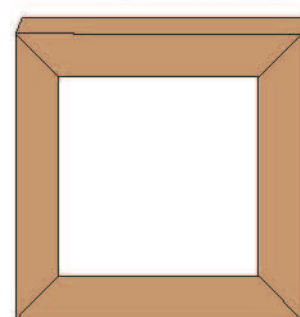
Top / Bottom Planks



Side Planks



Assembly

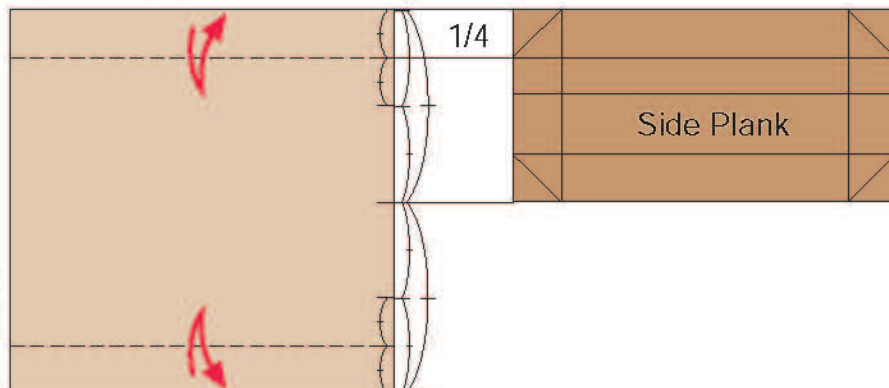


Fold top, bottom and side planks and then assemble them into a frame in the same way as shown for the Deep Tubby Square Frame on pages 2 to 5 of this article (book pages 68 to 71).

Back Piece

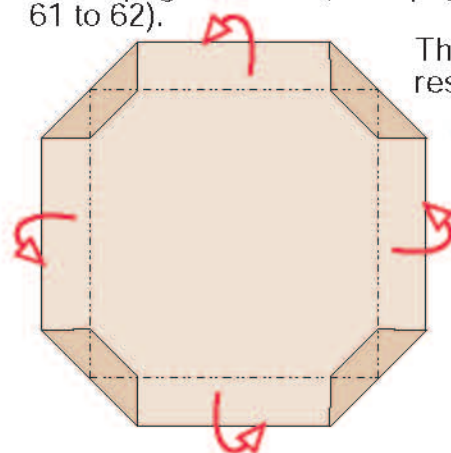
Take a square of paper for the background.

Valley fold the top edge of the square exactly $\frac{1}{4}$ of the short side of the rectangle used for planks as shown. Press the fold flat and unfold it.



1

Following steps from 2 to 7 are folding in the same manner as it was shown for the back piece of the Middle Square Frame in the article 'Shadowbox Frame (Equilateral Triangle Profile)', article pages 9 to 10 (book pages 61 to 62).



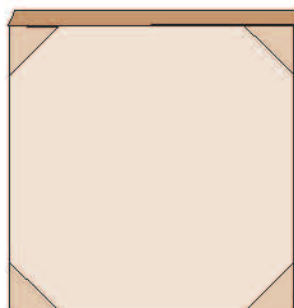
This should be the resulted backside.

7



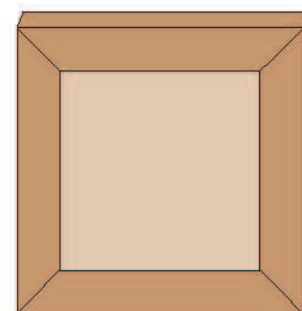
Take the frame by its back side toward you and consistently insert the flaps of the back piece into the slits of the frame.

8



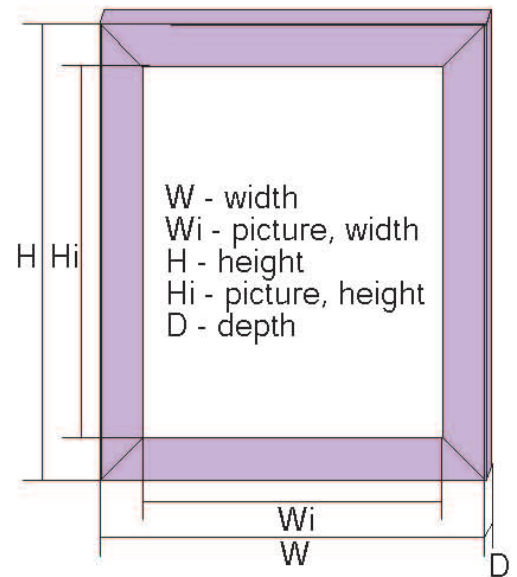
9

Here is the completed Slim Square Shadowbox Frame with the right triangle profile.

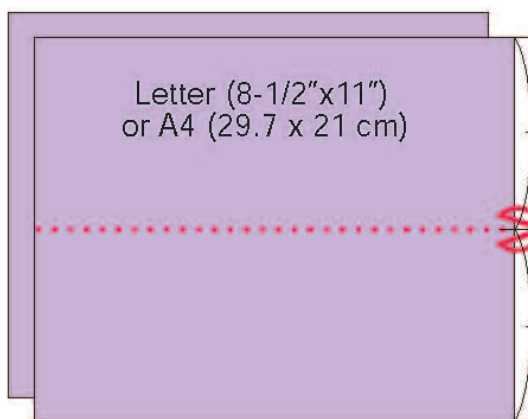


Slim Large Rectangular Frame

Using the same principle of folding of this frame with the right triangle profile, you may do various rectangular frames with a custom size.



Slim Large Rectangular Frame with a photo (folded from Letter format paper)

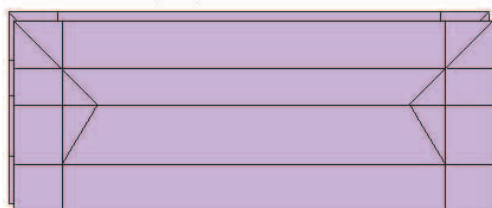


Use 2 sheets of Letter or A4 format to get 4 rectangles for planks, cutting each in half as shown. For the back piece, use a sheet of paper that is bigger than the resulted frame.



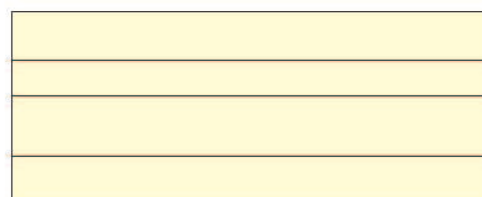
Top / Bottom Planks

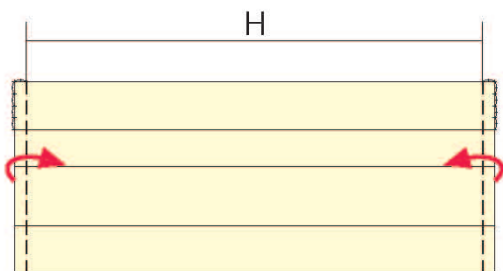
Fold the top and bottom planks in the same way as shown for the Deep Tubby Square Frame on pages 2 to 5 of this article (book pages 68 to 71).



Side Planks

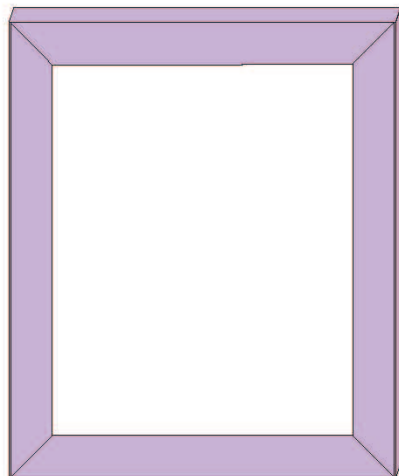
First, make plank pre-folding in the same way as shown for the Deep Tubby Square Frame on page 2 of this article (book page 68).





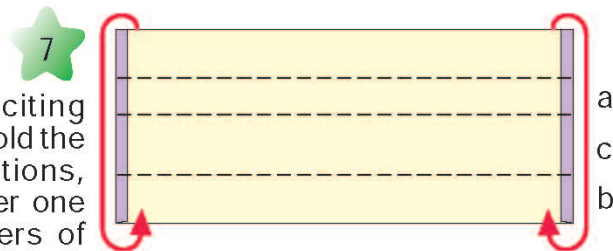
6 To use the maximum possible length of the rectangle and still have the closed ends on the side planks, we need to fold the right- and left-hand sides just a little, for example, on a distance of $\frac{1}{4}$ of the height of the upper section, as shown.

To make a customized back piece for this frame, follow suggestions in the article 'Back Piece' (book pages 123 to 126).



Along the exciting fold-lines, valley fold the horizontal sections, inserting the upper one between the layers of the bottom section.

This should be the result. Make another one like this, so that you have 2 side planks.



Assembly

Assemble the planks into a frame in the same way as shown for the Deep Tubby Square Frame on pages 2 to 5 of this article (book pages 68 to 71).

Here is the completed Rectangular Shadowbox Frame with the right triangle profile.

Congratulations! Now you may fold the various shapes & sizes of shadowbox frames with the right triangle profile. This frame is great for displaying images and artworks. Enjoy!





Shadowbox Frame (Isosceles Trapezoid Profile)

by Yuri Shumakov

This is a bold design of a shadowbox frame with the isosceles trapezoid profile that creates an inviting display with a nice shadow cast and an additional depth. The frame itself folds from 4 modules. It's good for displaying pictures and small artworks.



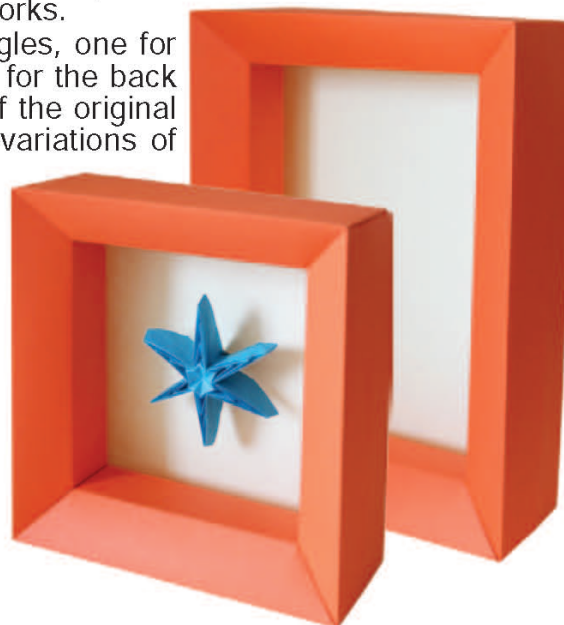
You will need 4 identical rectangles, one for each side, and 1 piece of paper for the back side. The various proportions of the original rectangle will result in different variations of the frame.

Also, optionally, for a hanger prepare a piece of line or thread that in length is a bit longer than the frame's perimeter. Fishing line works well for it. The line can be integrated into the frame during folding in the same manner as it's shown in the article 'Deep Shadowbox Frame (1:2 Rectangle Profile, 4 modules)'.

Suggested sizes: You may use sheets of regular formats of A4 (30x21 cm) or Letter (11x8.5 inches) as well as to make necessary rectangles or squares for your frame from them.

Suggested paper: Paper should be strong and relatively thick. Copy paper works quite well. You may use various craft paper as well.

Suggested colours: It can be any colour you wish. It's good to use a lighter shade for the background, when the frame is meant for displaying small objects.



6-1/2" (16.5cm) Deep Square Frame and 6-1/2x8-1/2" (16.5x21.5cm) Deep Rectangular Frame, each made out of 8-1/2" (21.5cm) squares.

11x10" (28x25cm) Shallow Large Rectangular Frame made out of 11x4.25" (28x10.8cm) rectangles, which is the half of Letter format.



9" (23cm) Deep Large Square Frame made out of Letter format sheets (11x8-1/2" / 21.5x28cm)

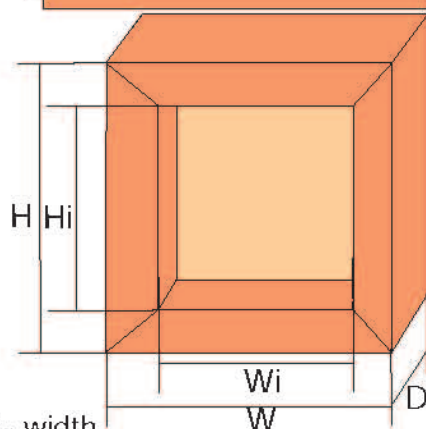
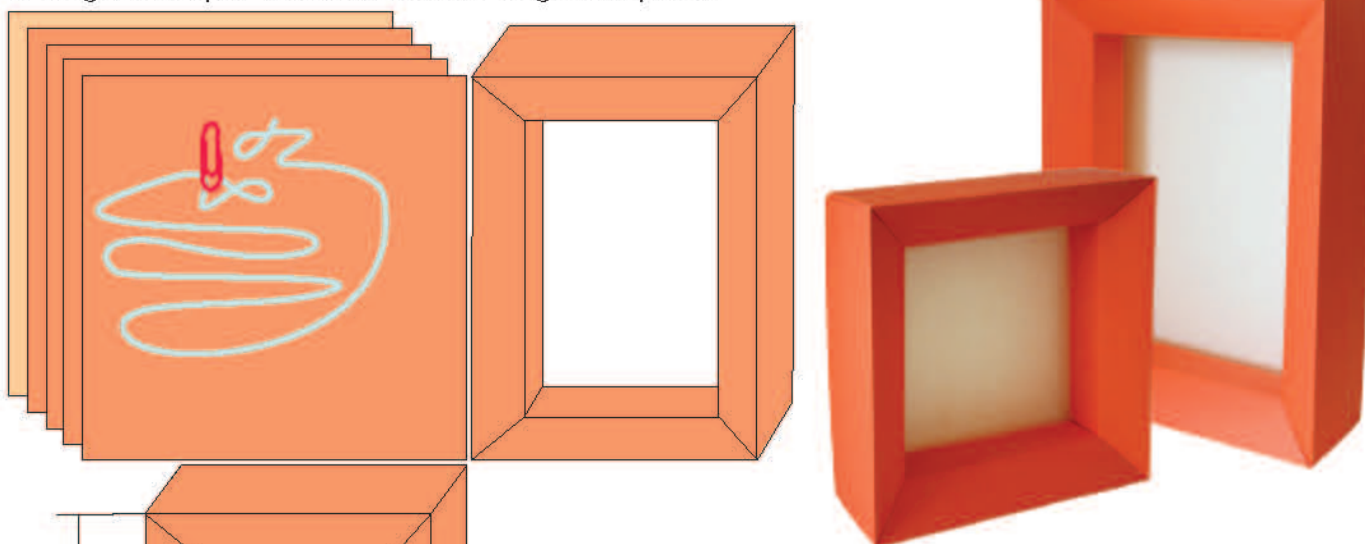


11x9" (28x23cm) Deep Large Rectangular Frame made out of Letter format sheets (11x8-1/2" / 28x21.5cm)

Shadowbox Frame (Isosceles Trapezoid Profile) © 2012 Yuri Shumakov - page 1

Deep Square or Rectangular Frame from Squares

Using squares you can fold a deep square frame with a side equal to $\frac{3}{4}$ of the side of an original square or a deep rectangular frame with a short side as $\frac{3}{4}$ of the side of an original square and a long side equal to the side of an original square.



W - width
Wi - picture, width
H - height
Hi - picture, height
D - depth

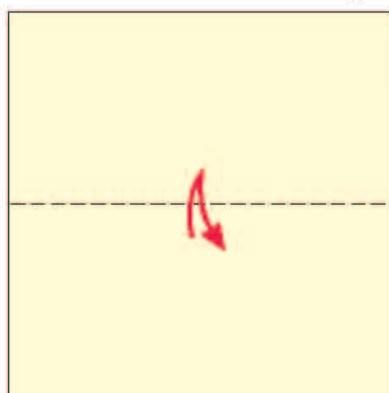
You may use squares made out of regular paper formats of A4 (30x21 cm) or Letter (11x8.5 inches).

For instance, when using sheets of Letter format (11 x 8-1/2 inches) to get 8-1/2 inch squares, it will result in a 6-1/2-inch square frame with 4-1/2-inch square picture space, and frame's depth about 2-1/4 inches. In case of the rectangular frame, its dimensions will be 8-1/2 x 6-1/2 inches with a 6-1/2 x 4-1/2 inches picture space and the frame's depth as 2-1/4 inches.

For the frame we will need 1 top plank, 1 bottom plank and 2 side planks. All the planks share the first 4 steps of pre-folding and then fold differently.

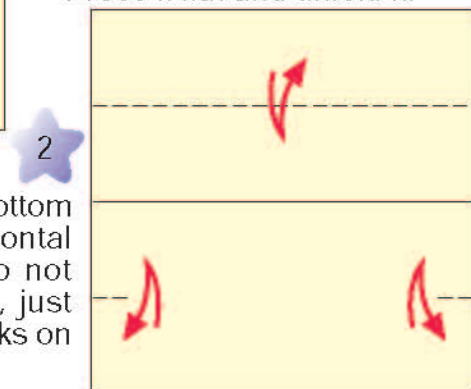
Plank Pre-Folding

If using two-colour paper, begin with coloured side down.



- 1 Valley fold it in half from bottom to top. Press it flat and unfold it.

Valley fold the top edge to meet the horizontal middle fold-line. Press it flat and unfold it.

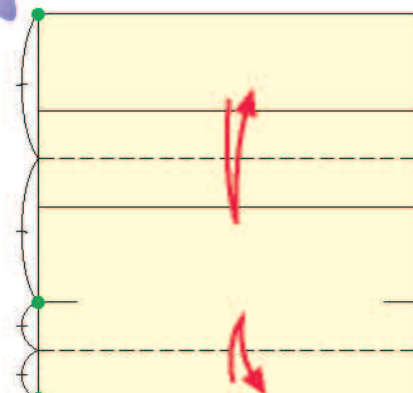


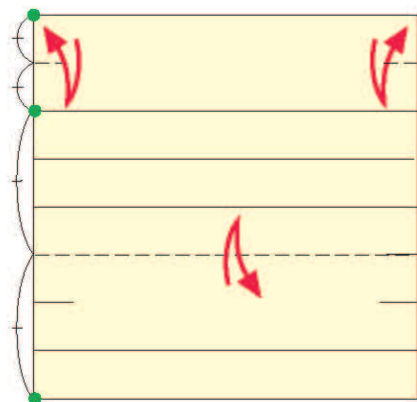
- 2

Then, valley fold the bottom edge to meet the horizontal middle fold-line, but do not press it completely flat, just make the small fold-marks on the sides, as shown.

- 3

Valley fold the top and bottom edges to meet the small fold-marks made in the previous step. Press them flat and unfold them.





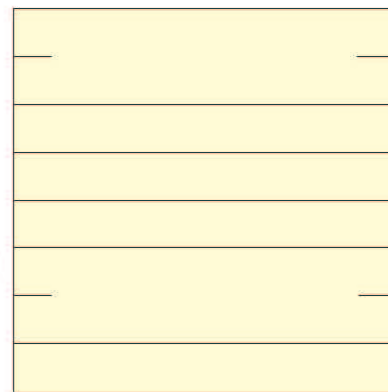
4 Valley fold and unfold the top and bottom edges to meet the upper fold-line made in step 2, but do not press the top edge fold completely flat, just make the small fold-marks on the sides, as shown.

Note, the distance between two lower fold-lines will be the depth of the future frame.

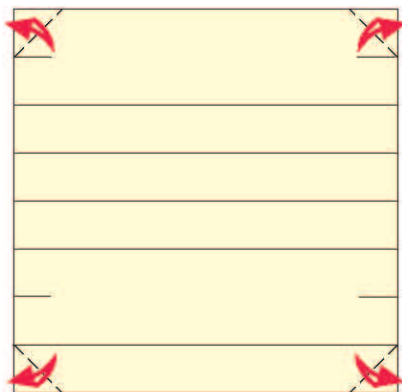
5

This should be the result. Now we have a pre-folded

paper for a frame plank, no matter it's a side, top or bottom plank. Now pre-fold other squares in the same way, so that you will have 4 pre-folded squares for all the planks.

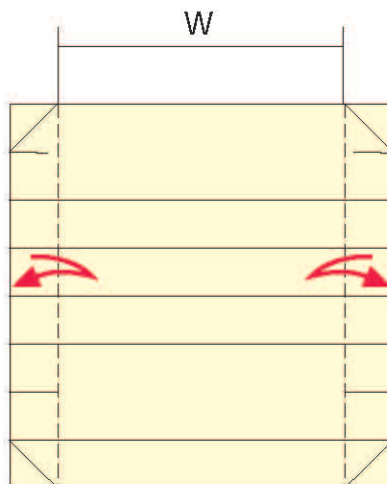


Top / Bottom Plank



Take the pre-folded square, place it as shown. Working with the corners, valley fold and unfold each of them along the adjacent fold-line, as shown, thereby making the diagonal fold-marks.

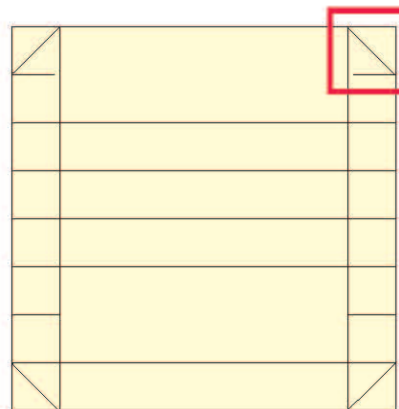
5



Valley fold the right- and left-hand sides being guided by the intersections of the fold-marks and the top and bottom edges, as shown. Press the folds flat and unfold them. Now the resulted distance in the middle (W) will be the width of the future frame.

6

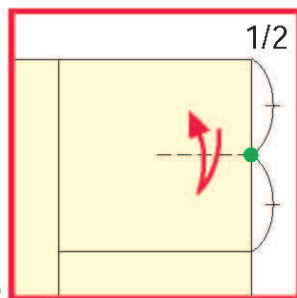
Locate the upper right corner to work with. The marked area will be enlarged in the next steps.



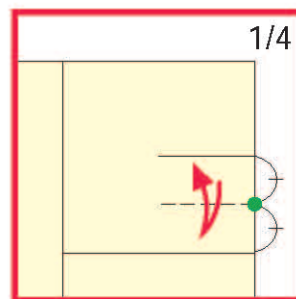
7

Make a fold-mark dividing the marked distance in half.

8

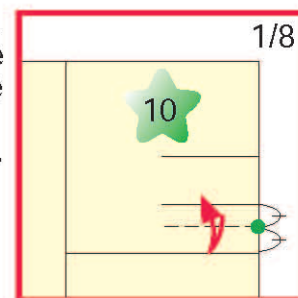


Make the final fold-mark dividing in half the distance between the fold-line and the fold-mark made in step 9. Turn the paper over.

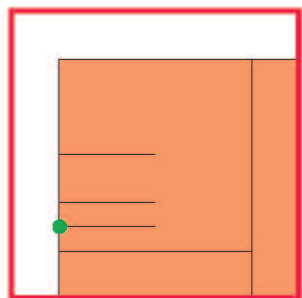


9

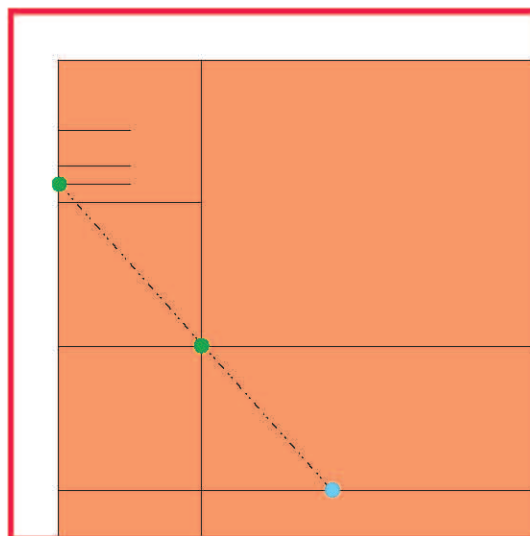
Make another fold-mark dividing in half the distance between the fold-line and the fold-mark made in step 8.



This should be the result. The intersection of the fold-mark made in step 10 and the edge is what we need to make the following fold.



11

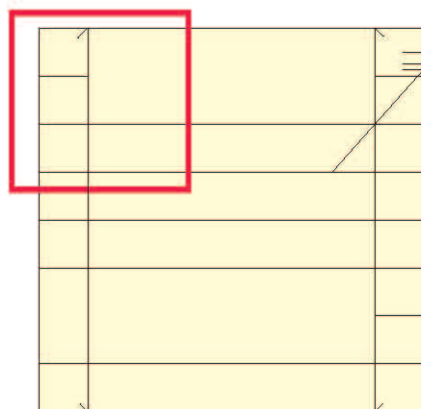


Locate the intersection of the fold-mark (made in step 10) and the edge as well as the intersection of the horizontal and vertical fold-lines that both marked by the green dots. By mountain folding, make a limited fold-line connecting these dots and extend this line until meet the next horizontal fold-line marked by the blue dot.

12

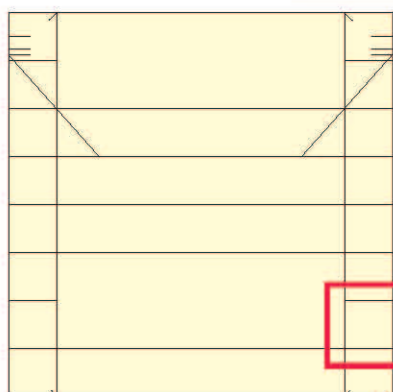
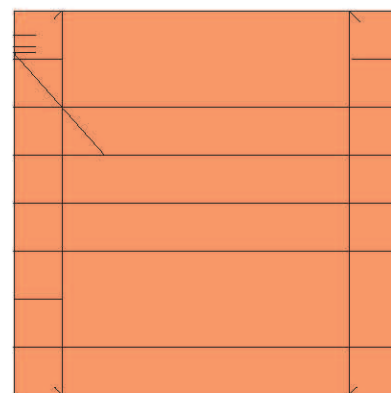
Now working with the upper left area, repeat steps 8 to 12 as in mirror.

14



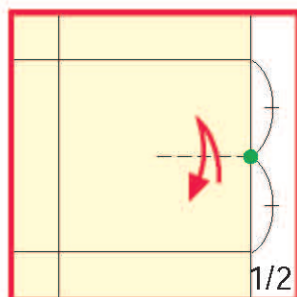
13

This should be the result. Turn the paper over from side to side.



This should be the result. Now at the lower right area locate the small square which is the second from the bottom. The marked area will be enlarged in the next steps.

15

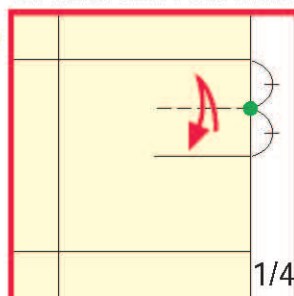


16

Make a fold-mark dividing the marked distance in half.

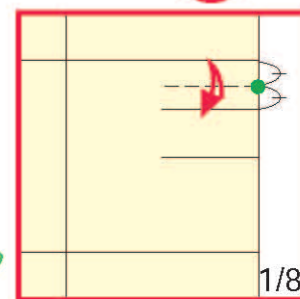
Make another fold-mark dividing in half the distance between the fold-line right above the fold-mark made in step 16 and this fold-mark itself.

17

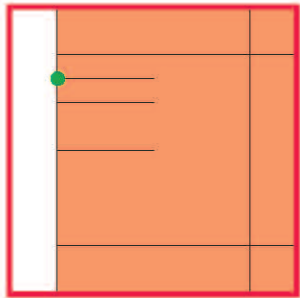


18

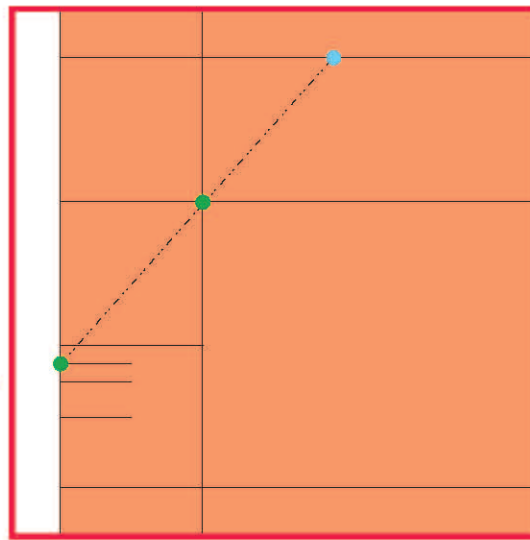
Make the final fold-mark dividing in half the distance between the fold-line and the fold-mark made in step 17. Turn the paper over.



This should be the result. The intersection of the fold-mark made in step 18 and the edge is what we need to make the following fold.



19



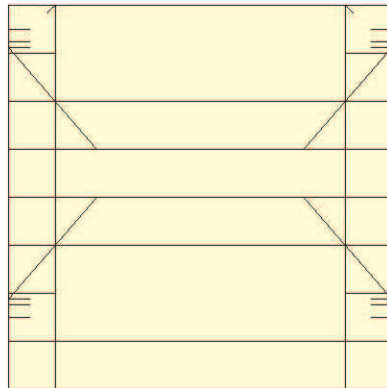
Locate the intersection of the fold-mark (made in step 18) and the edge as well as the intersection of the horizontal and vertical fold-lines marked by the green dots. By mountain folding, make a limited fold-line connecting these dots and extend this line until meet the next horizontal fold-line marked by the blue dot.

20

Then, turn the paper over from side to side.

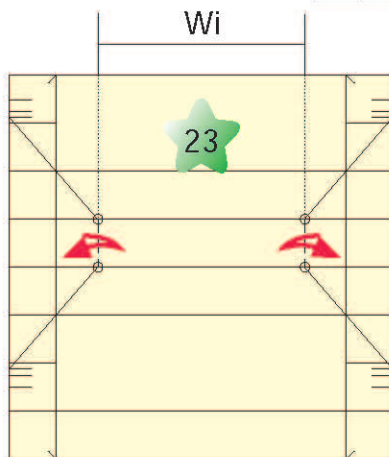
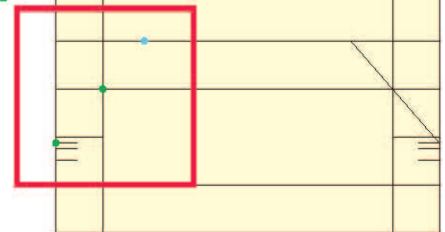
This should be the result.

22



Locate the lower left area and repeat steps 15 to 20 for it as in mirror.

21

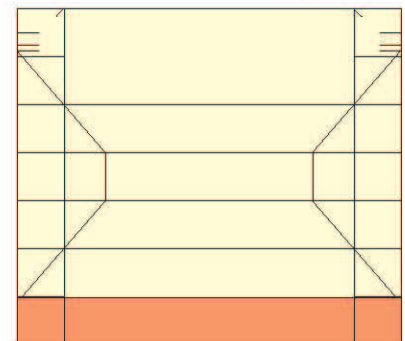
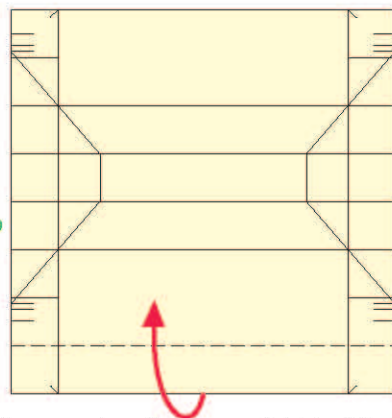


23

By valley folding, make the limited fold-lines between the intersections marked by the circles as shown. This will be the picture width (W_i) of the future frame.

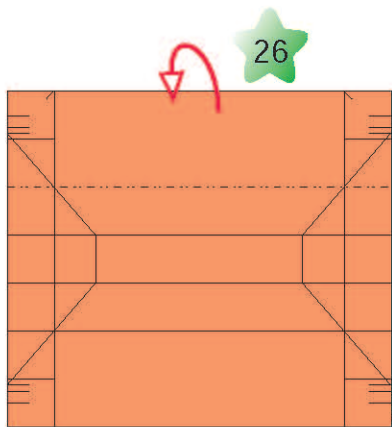
24

Valley fold the bottom horizontal section up as shown.



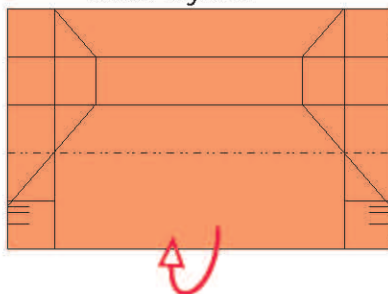
25

This should be the result. Turn the paper over from side to side.

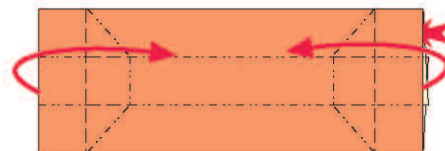


Mountain fold the upper section back as shown.

This should be the result. Mountain fold the lower section back, covering the back layers.

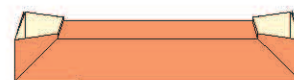


Separating the front layer from the back layers at sides, bring the side flaps up...



...Insert your fingers into the them and gently move hands toward each other to shape the paper along the existing fold-lines into the position shown in the next step.

This should be the result.



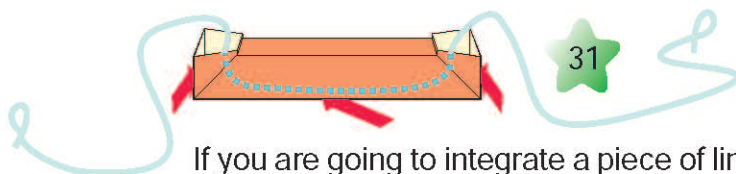
Top Plank

In this way there should be formed the top plank and the bottom plank.

Back side. Note that there are two layers at the bottom and sides, so that you can see the slits that we will position to be on the back of the frame later.



Bottom Plank

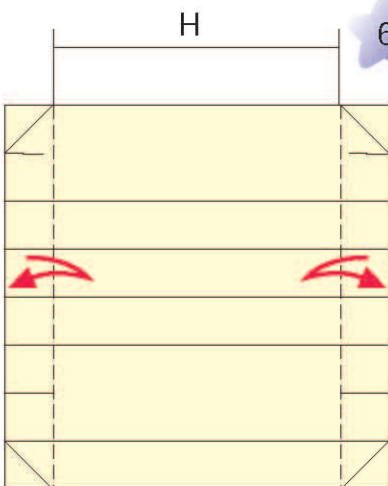
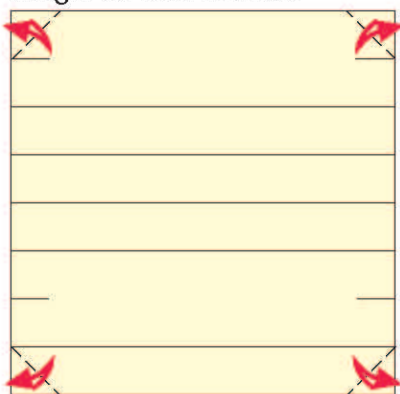


If you are going to integrate a piece of line into the frame for hanging, then in this step, working with the bottom plank, insert the piece of line into it as shown.

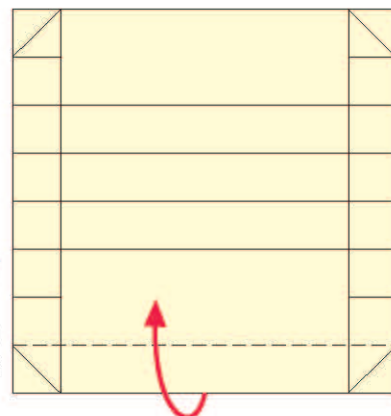
Side Plank for Square Frame

Take the pre-folded square, place it as shown in step 5.

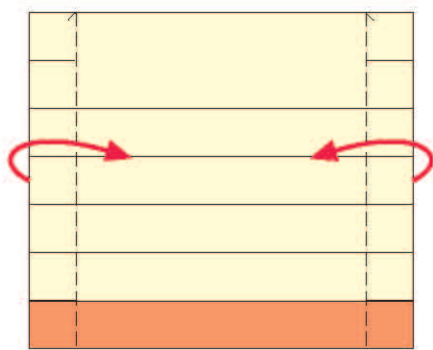
Working with the corners, valley fold and unfold each of them along the adjacent fold-line, as shown, thereby making the diagonal fold-marks.



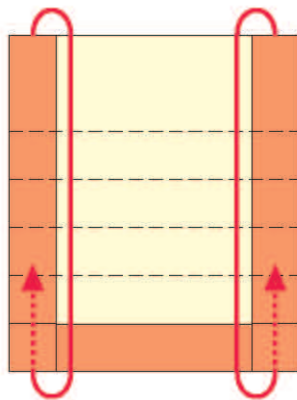
Valley fold the right- and left-hand sides being guided by the intersections of the fold-marks and the top and bottom edges, as shown. Press the folds flat and unfold them. Now the resulted distance in the middle (H) will be the height of the future frame.



Valley fold the bottom horizontal section up as shown.



8 Valley fold the right- and left-hand sides along the existing fold-lines.



Along the existing fold-lines, valley fold the horizontal sections, inserting the upper one between the layers of the bottom section.

9

This is the result. Note, there should be a slit between two layers at the bottom.

10

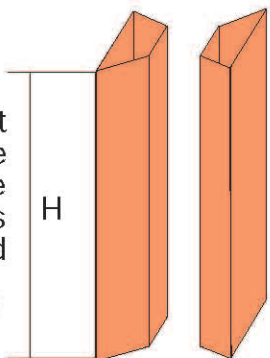


11

The side plank is ready for the assembling.

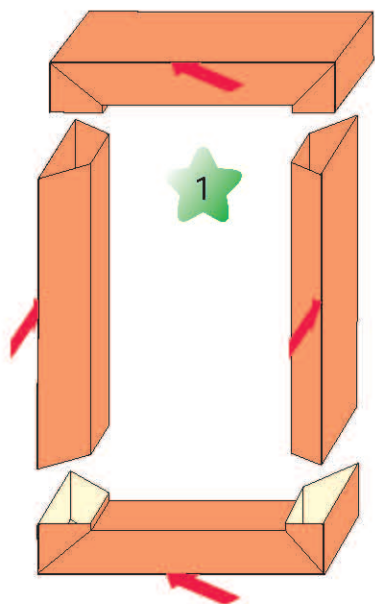
Make another one like this, so that you have 2 side planks. Note, the resulted distance (H) will be the height of the future frame, which is equal to the width (W) since we fold a square frame.

12



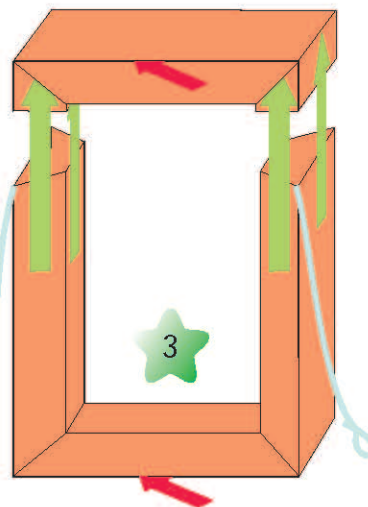
Square Frame Assembly

Get ready the bottom plank, the top plank and 2 side planks.



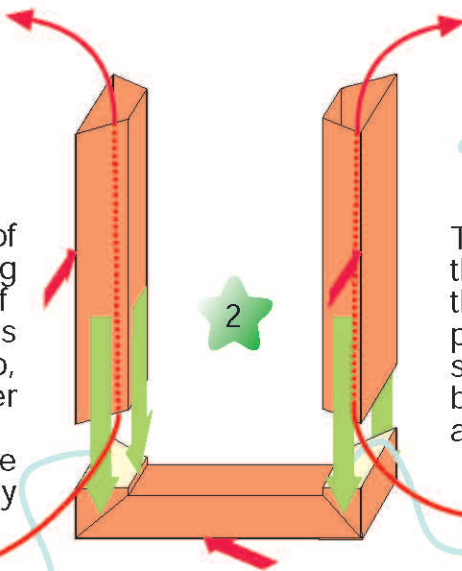
Place the bottom plank by the back side toward you, where there is a slit at the bottom and sides.

Take the side planks and also locate them as shown, so that there is a slit on the outer side of each of them.



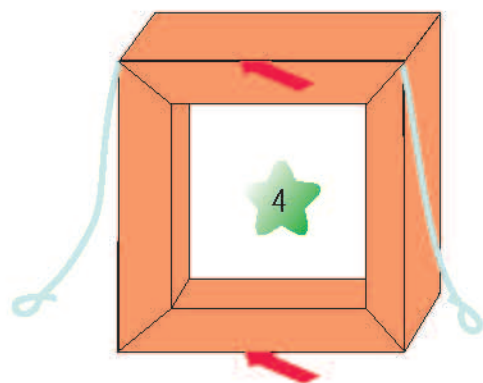
If you are to integrate a piece of line into the frame for hanging purposes, then pass the ends of line through the side planks as shown (it might be easier to do, if you turn the construction over for this).

Consistently insert each side plank, sliding it down carefully between the layers of the bottom plank as shown.



This should be the result. Now take the top plank by its back side with the slit and place it atop the side planks. Step-by-step, insert each side plank, sliding it carefully between the layers of the top plank as shown.

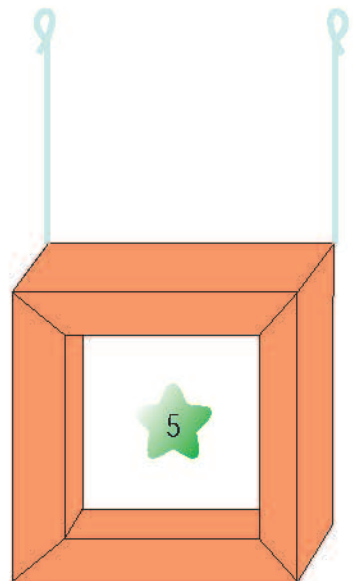
Keep the ends of lines at the sides as shown.



This should be the result. Be sure that you assembled all the planks correctly - there is a slit along the outer perimeter of the frame for inserting the back piece.



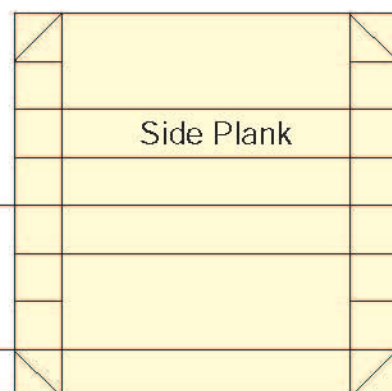
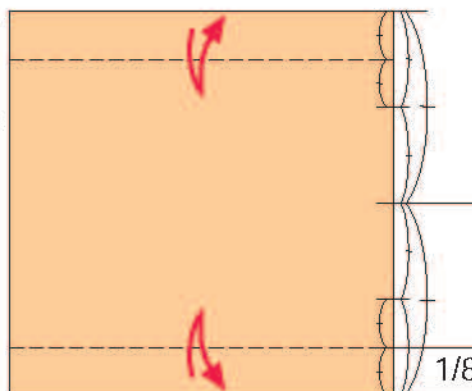
The frame is almost ready! Now we just need to add the back piece.



Back Piece

Use the 5th square for the back piece.

Valley fold the top edge exactly $\frac{1}{8}$ of the side of the square, which is equal to the upper section of the pre-folded sheet of the side plank as shown. Press the fold flat and unfold it. Repeat the same for the bottom part.

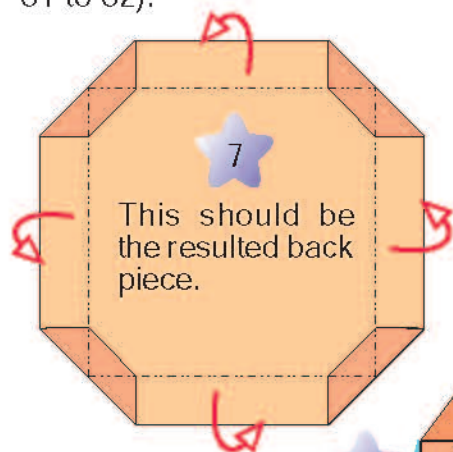


The following steps from 2 to 7 are folding in the same manner as it was shown for the back piece of the Middle Square Frame in the article 'Shadowbox Frame (Equilateral Triangle Profile)', article pages 9 to 10 (book pages 61 to 62).

Deep Square Frame with Origami Artwork

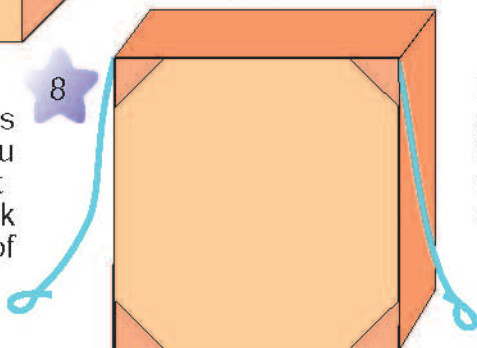


Deep Square Frame with an image



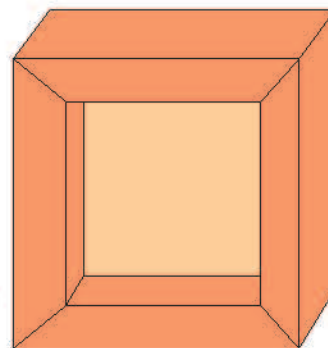
Take the frame by its back side toward you and consistently insert the flaps of the back piece into the slits of the frame.

8



Here is the completed Square Shadowbox Frame with the isosceles trapezoid profile.

9

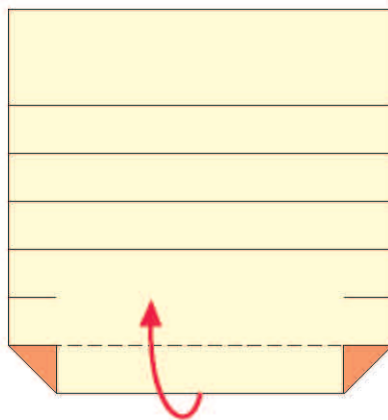
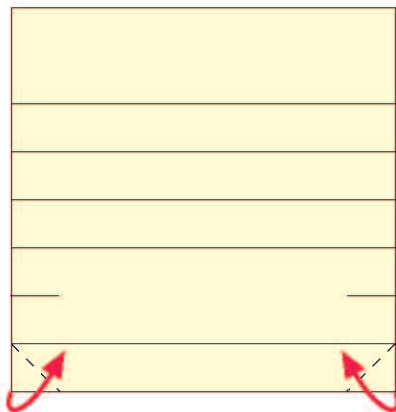


Side Plank for Rectangular Frame

Take the pre-folded square. For the rectangular frame we will use the full side of it.

Working with the corners at the bottom, valley fold each of them along the adjacent fold-line, as shown.

5

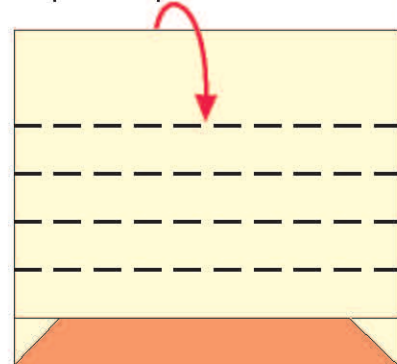


6

Valley fold the bottom horizontal section up as shown.

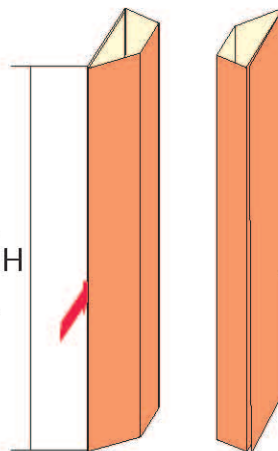
Along the exciting fold-lines, valley fold the horizontal sections into a tube with the isosceles trapezoid profile.

7



The side plank is ready for the assembling. Make another one like this, so that you have 2 side planks.

9



8



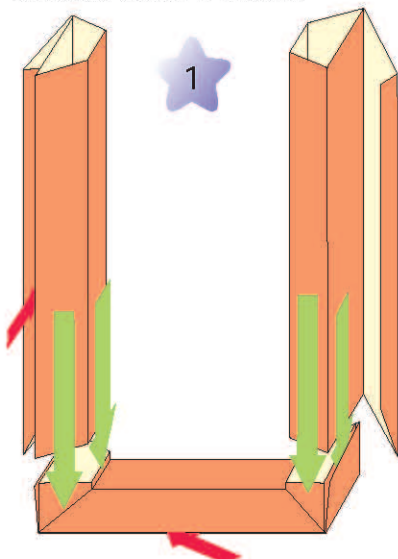
This should be the result. The side plank is not locked itself, but it will be locked during the frame assembly.

Rectangular Frame Assembly

Get ready the bottom plank, the top plank and 2 side planks.

Place the bottom plank by the back side toward you, where there is a slit at the bottom and sides. Take the side planks and also locate them as shown, so that there is an open layer on the outer side of each if them.

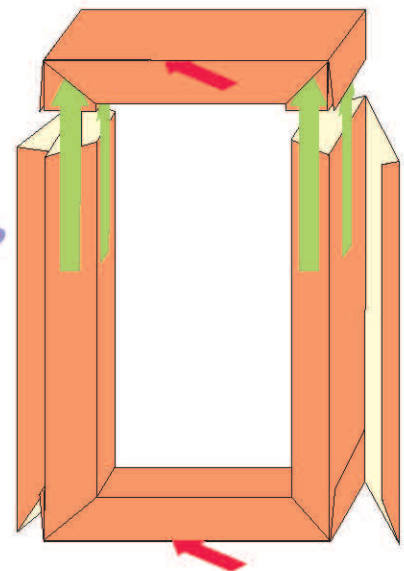
1



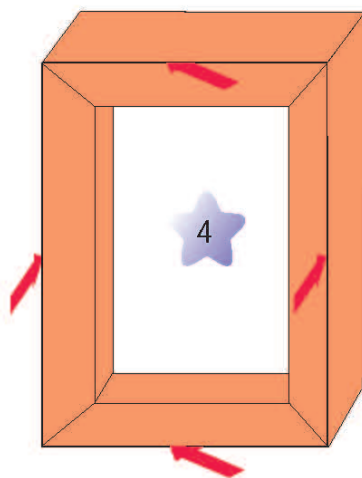
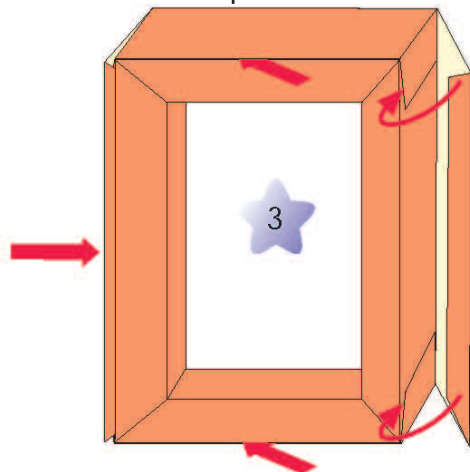
Consistently insert each side plank, sliding it down carefully between the layers of the bottom plank as shown in the next step.

2

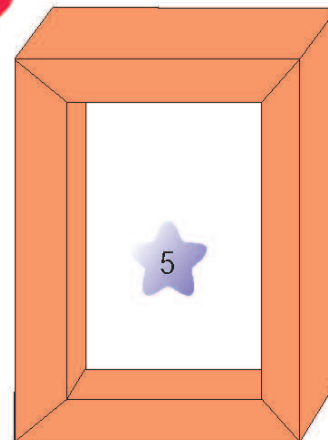
This should be the result. Now take the top plank by its back side with the slit and place it atop the side planks. Step-by-step, insert each side plank, sliding it carefully between the layers of the top plank as shown.



This should be the result. Close each side plank, inserting the flap under the layers on the top and bottom planks as shown.



Note, there is a slit along the outer perimeter of the frame for inserting the back piece.



Here is the completed Rectangular Shadowbox Frame with the isosceles trapezoid profile.

Now we just need to add a back piece. Follow suggestions in the article 'Back Piece' (book pages 123 to 126) to make a customized back piece for this frame.



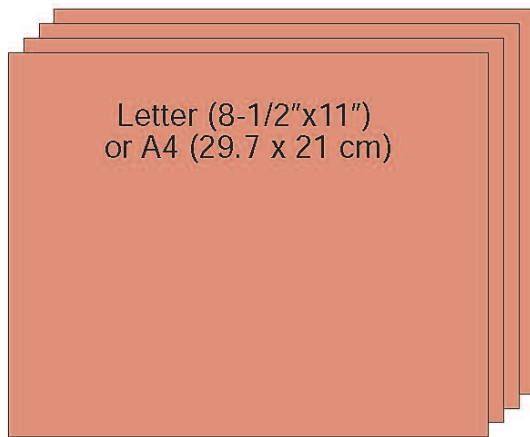
6-1/2x8-1/2" (16.5x21.5cm)
Deep Rectangular Frame made
out of 8-1/2" (21.5cm) squares.



Deep Rectangular
Frame with an image



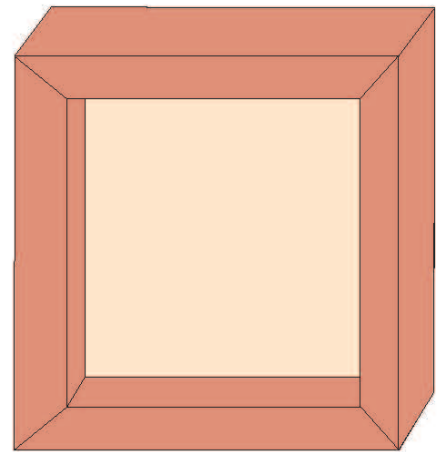
Deep Square Frame from Letter / A4 format



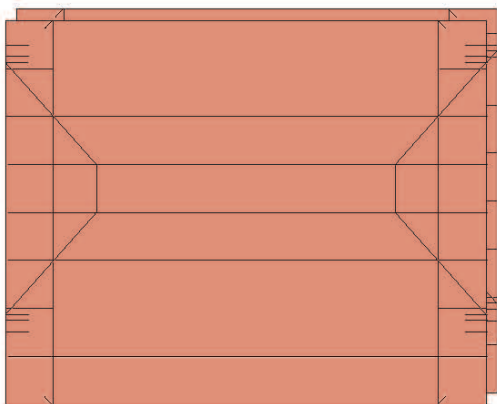
Letter (8-1/2"x11")
or A4 (29.7 x 21 cm)

You may use sheets of paper of A4 (30x21 cm) or Letter (11x8.5 inches) format to make a rather large deep square frame with the isosceles trapezoid profile.

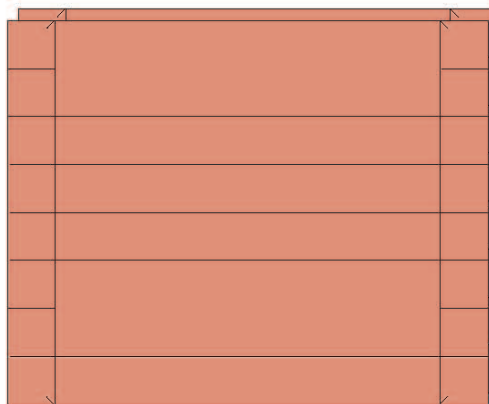
For instance, when using sheets of Letter format (11 x 8-1/2 inches), it will result in a 9-inch square frame with 7-inch square picture space, and frame's depth about 2-1/4 inches.



Top / Bottom Planks



Side Planks



Assembly

Fold top, bottom and side planks and then assemble them into a frame in the same way as shown for the Deep Square Frame from squares on pages 2 to 8 of this article (book pages 80 to 86).

To make a customized back piece for this frame, follow suggestions in the article 'Back Piece' (book pages 123 to 126).

9" (23cm) Deep Large Square Frame made out of Letter format sheets (11x8-1/2" / 21.5x28cm)



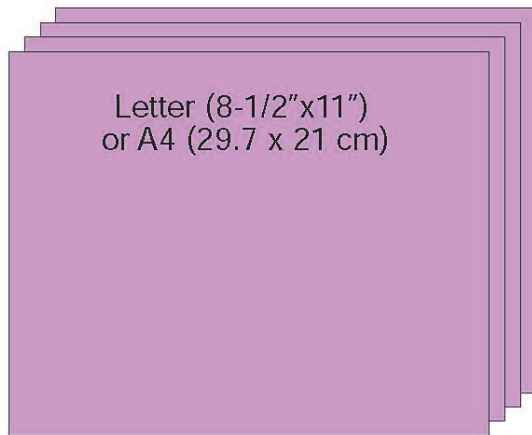
Deep Large Square Frame with an image



Deep Large Square Frame with Origami Artworks

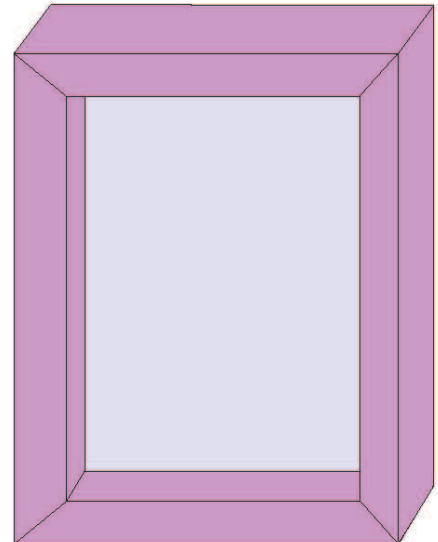
Here is the completed Deep Square Frame with the isosceles trapezoid profile.

Deep Rectangular Frame from Letter / A4 format

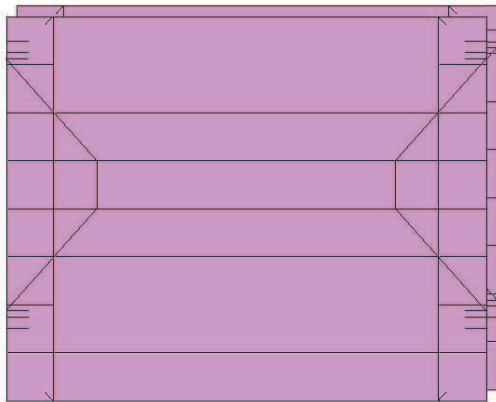


You may use sheets of paper of A4 (30x21 cm) or Letter (11x8.5 inches) format to make a rather large deep rectangular frame with the isosceles trapezoid profile.

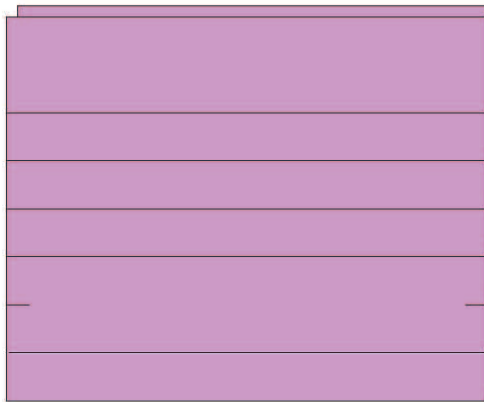
For instance, when using sheets of Letter format (11 x 8-1/2 inches), dimensions of the rectangular frame will be 11 x 9 inches with a 9-1/4 x 7 inches picture space and the frame's depth as 2-1/4 inches.



Top / Bottom Planks



Side Planks



Assembly

Fold top, bottom and side planks and then assemble them into a frame in the same way as shown for the Deep Rectangular Frame from squares on pages 2 to 10 of this article (book pages 80 to 88).

Here is the completed Deep Rectangular Frame with the isosceles trapezoid profile.

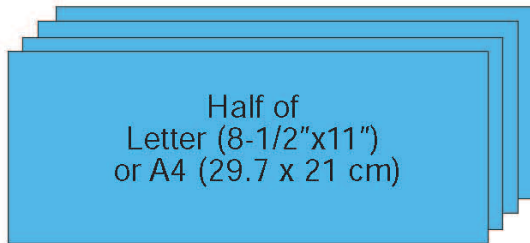
To make a customized back piece for this frame, follow suggestions in the article 'Back Piece' (book pages 123 to 126).

11x9" (28x23cm) Deep Large Rectangular Frame made out of Letter format sheets (11x8-1/2" / 28x21.5cm)



Deep Large Rectangular Frame with an image

Shallow Rectangular Frame from Half of Letter / A4



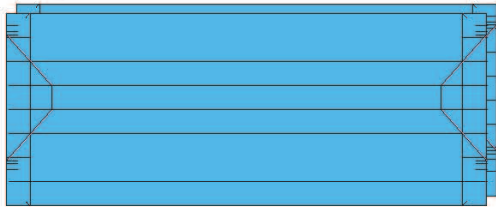
Half of
Letter (8-1/2"x11")
or A4 (29.7 x 21 cm)

To fold a shallow large rectangular frame with the isosceles trapezoid profile, use long halves of sheets of paper of A4 (30x21 cm) or Letter (11x8.5 inches) format.

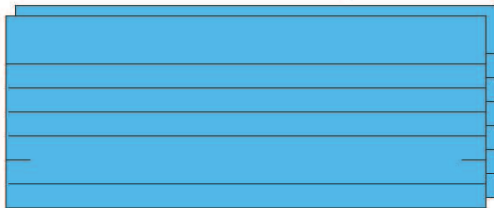
For instance, when using sheets of Letter format (11 x 8-1/2 inches), dimensions of the rectangular frame will be 11 x 10 inches with a 10 x 8-3/4 inches picture space and the frame's depth about 1 inch.

Fold top, bottom and side planks and then assemble them into a frame in the same way as shown for the Deep Rectangular Frame from squares on pages 2 to 10 of this article (book pages 80 to 88).

Top / Bottom Planks



Side Planks



11x10"
(28x25cm)
Shallow Large
Rectangular
Frame made out
of 11x4.25"
(28x10.8cm)
rectangles, which
is the half of
Letter format.



Here is the completed
Shallow Rectangular
Frame with the isosceles
trapezoid profile.

To make a customized back piece for this frame, follow suggestions in the article 'Back Piece' (book pages 123 to 126).

Congratulations! Now you may fold the various shapes & sizes of shadowbox frames with the isosceles trapezoid profile. This frame is great for displaying images and artworks. Enjoy!



*Deep Shadowbox Frames with
Isosceles Trapezoid Profile*



Shadowbox Frame (Right Trapezoid Profile)

by Yuri Shumakov

This is an elegant design of a shadowbox frame with the right-angled trapezoid profile that creates a very inviting display with a good depth. The frame itself folds from 4 modules. It's good for displaying pictures and small artworks.

Right
Trapezoid Profile

You will need 4 identical rectangles, one for each side, and 1 piece of paper for the back side. The various proportions of the original rectangle will result in different variations of the frame. Also, optionally, for a hanger

prepare a piece of line or thread that in length is a bit longer than the frame's perimeter. Fishing line works well for it. The line can be integrated into the frame during folding in the same manner as it's shown in the article 'Deep Shadowbox Frame (1:2 Rectangle Profile, 4 modules)'.

Suggested sizes: You may use sheets of regular formats of A4 (30x21 cm) or Letter (11x8.5 inches) as well as to make necessary rectangles or squares for your frame from them.

Suggested paper: Paper should be strong and relatively thick. Copy paper works quite well. You may use various craft paper as well.

Suggested colours: It can be any colour you wish. It's good to use a lighter shade for the background, when the frame is meant for displaying small objects.



6-1/2x8-1/2" (16.5x21.5cm)
Deep Rectangular Frame made
out of 8-1/2" (21.5cm) squares

10" (25cm) Shallow Large Square
Frame made out of 11x4.25"
(28x10.8cm) rectangles, which is
the half of Letter format



11x9" (28x23cm) Deep
Large Rectangular
Frame made out of
Letter format sheets
(11x8-1/2" / 28x21.5cm)



6-1/2" (16.5cm) Deep
Square Frame made out
of 8-1/2" (21.5cm) squares

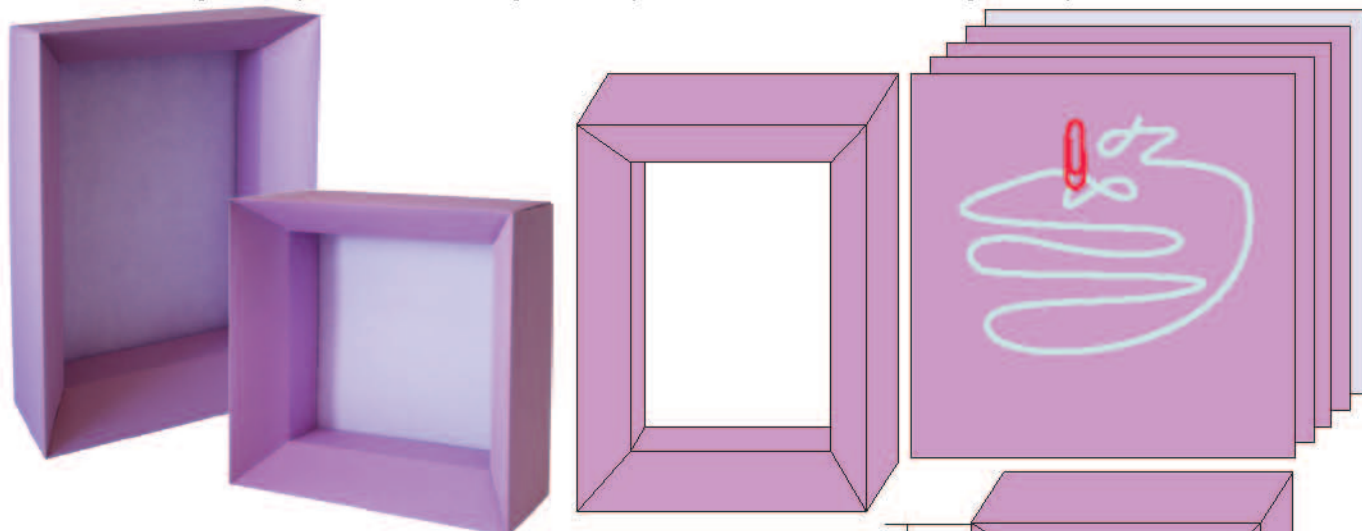


9" (23cm) Deep Large Square
Frame made out of Letter format
sheets (11x8-1/2" / 21.5x28cm)

Shadowbox Frame (Right Trapezoid Profile) © 2012 Yuri Shumakov - page 1

Deep Square or Rectangular Frame from Squares

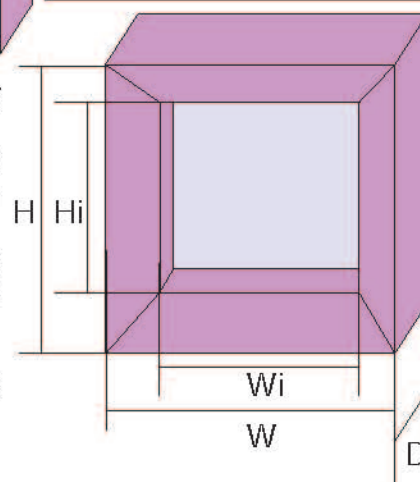
Using squares you can fold a deep square frame of the right trapezoid profile with a side equal to $\frac{3}{4}$ of the side of an original square or a deep rectangular frame with a short side as $\frac{3}{4}$ of the side of an original square and a long side equal to the side of an original square.



You may use squares made out of regular paper formats of A4 (30x21 cm) or Letter (11x8.5 inches).

For instance, when using sheets of Letter format (11 x 8-1/2 inches) to get 8-1/2 inch squares, it will result in a 6-1/2-inch square frame with 4-3/4-inch square picture space, and frame's depth about 2-1/4 inches. In case of the rectangular frame, its dimensions will be 8-1/2 x 6-1/2 inches with a 6-3/4 x 4-3/4 inches picture space and the frame's depth as 2-1/4 inches.

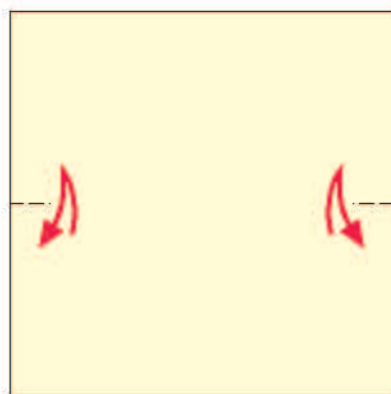
For the frame we will need 1 top plank, 1 bottom plank and 2 side planks. All the planks share the first 9 steps of pre-folding and then fold differently.



W - width
Wi - picture, width
H - height
Hi - picture, height
D - depth

Plank Pre-Folding

If using two-colour paper, begin with coloured side down.

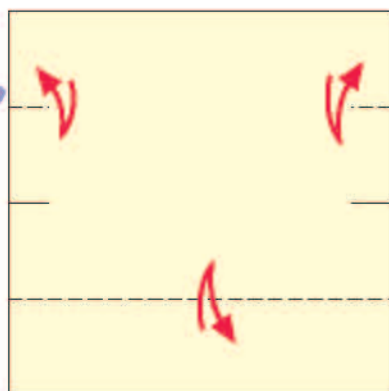


1

Valley fold the square in half from bottom to top, but do not press it completely flat, just make the small fold-marks on the sides, as shown.

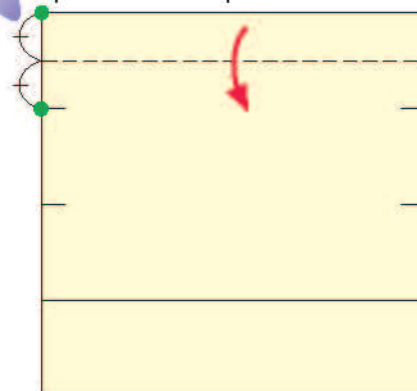
2

Valley fold the top edge to meet the horizontal middle fold-marks. Do not press it completely flat, just make the small fold-marks on the sides, as shown. Then valley fold the bottom edge to meet the horizontal middle fold-marks. Press it flat and unfold it.

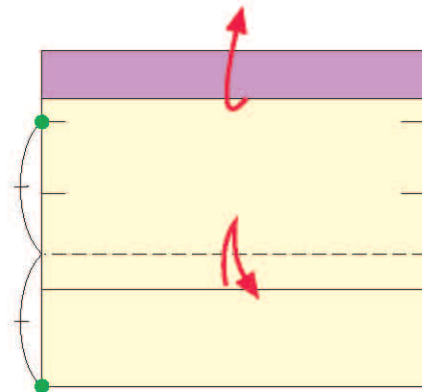
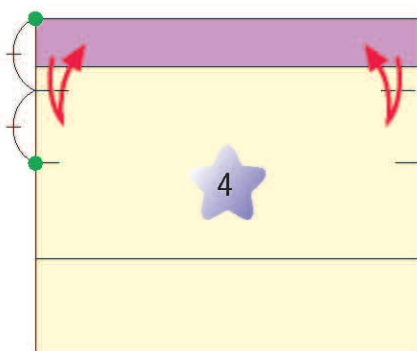


3

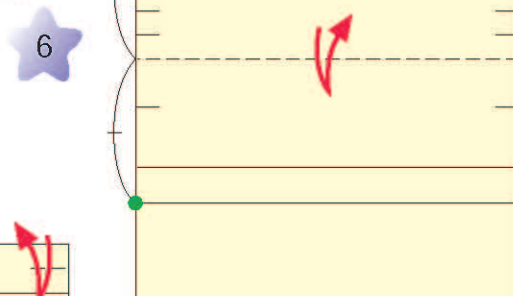
Valley fold the top edge down to meet the fold-marks made in the previous step as shown.



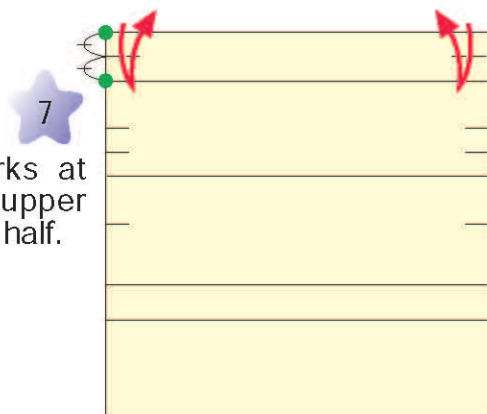
Valley fold the top edge to meet the fold-marks made in step 1, but do not press it completely flat, just make the small fold-marks on the sides, as shown.



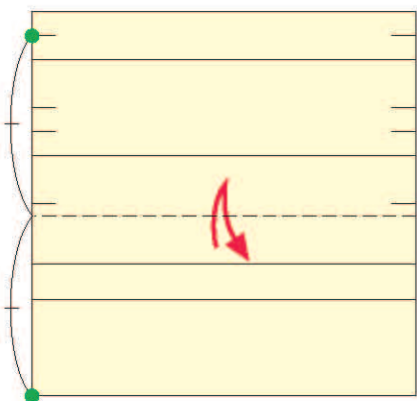
Valley fold the bottom edge up to meet the fold-marks made in step 4. Press it flat and unfold it. Unfold the upper narrow flap too.



Make the fold-marks at sides, dividing the upper horizontal section in half.

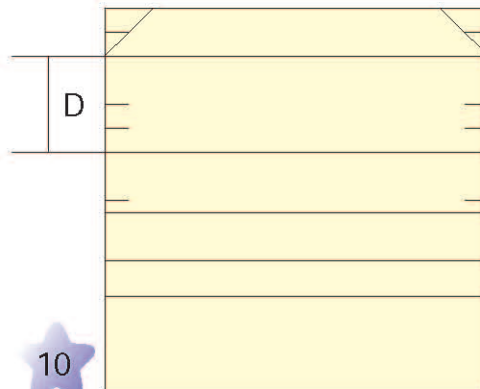


Valley fold the top edge down to meet the fold-line made in step 2, as shown. Press it flat and unfold it.

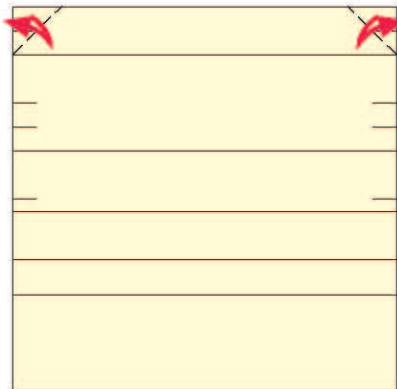


Valley fold the bottom edge up to meet the fold-marks made in step 7. Press it flat and unfold it.

Note, the distance between two upper fold-lines will be the depth of the future frame.



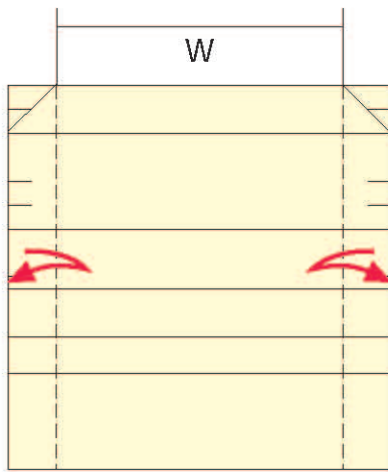
Working with the upper corners, valley fold and unfold each of them along the adjacent fold-line, as shown, thereby making the diagonal fold-marks.



This should be the result. Now we have a pre-folded paper for a frame plank, no matter it's a side, top or bottom plank. Now pre-fold other squares in the same way, so that you will have 4 pre-folded squares for all the planks.

Top / Bottom Plank

Take the pre-folded square, place it as shown in step 10.

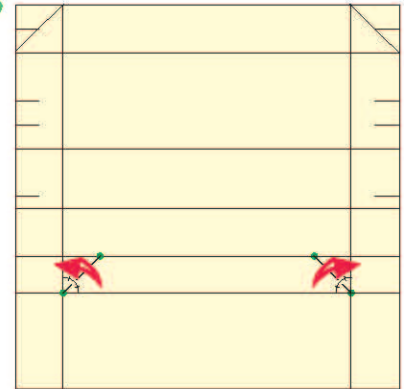


10

Valley fold the right- and left-hand sides being guided by the intersections of the fold-marks and the top edge, as shown. Press the folds flat and unfold them. Now the resulted distance in the middle (W) will be the width of the future frame.

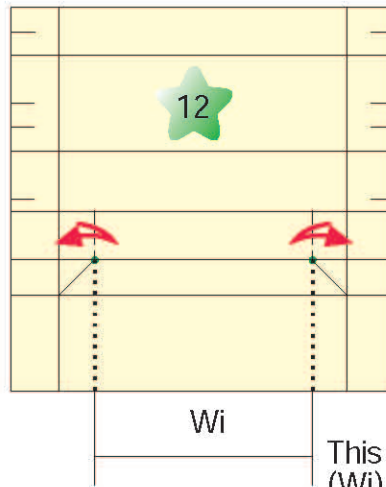
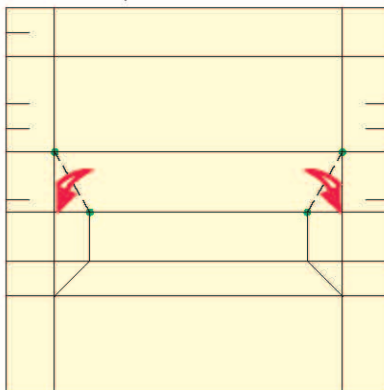
Working with the narrow horizontal section, the 2nd from the bottom, by valley folding make the limited diagonal fold-lines as shown.

11



This should be the result. Working with the horizontal section in the middle, the 3rd from the top, by valley folding make the limited diagonal fold-lines connecting the intersections of lines marked by the dots, as shown.

12



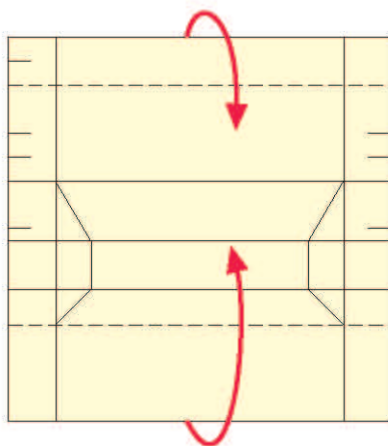
13

In the horizontal section, the 3rd from the bottom, by valley folding, make the limited vertical fold-lines, being guided by the intersections marked by the circle as shown.

This will be the picture width (W_i) of the future frame.

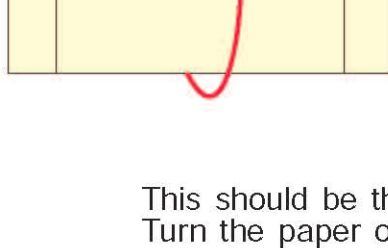
This should be the result.

14



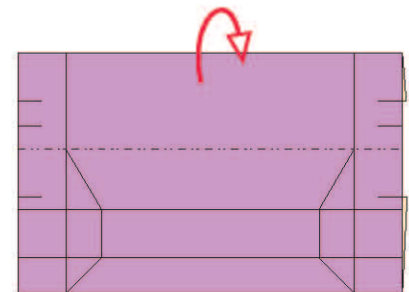
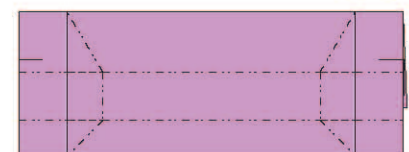
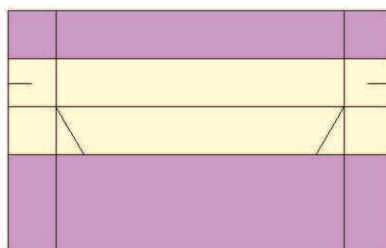
This should be the result. Along the existing fold-lines, valley fold the upper narrow horizontal section down and the lower horizontal section up, as shown.

15



This should be the result. Turn the paper over from side to side.

16

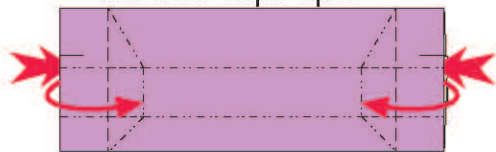


17

Mountain fold the upper horizontal section behind.

18

Separating the front layer from the back layers at sides, bring the side flaps up...



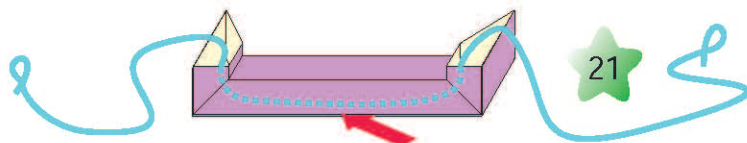
...Insert your fingers into the them and gently move hands toward each other to shape the paper along the existing fold-lines into the position shown in the next step.

Back side. Note that there are two layers at the bottom and sides, so that you can see the slits that we will position to be on the back of the frame, when time comes.

19



Bottom Plank



If you are going to integrate a piece of line into the frame for hanging, then in this step, working with the bottom plank, insert the piece of line into it as shown.

Top Plank

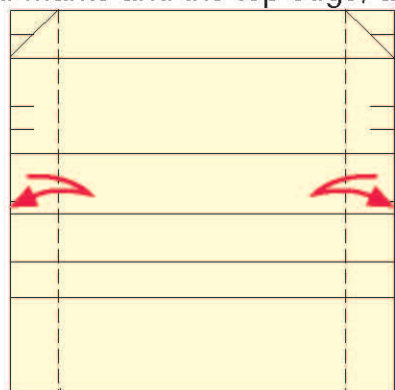


In this way there should be formed the top plank and the bottom plank.

Side Plank for Square Frame

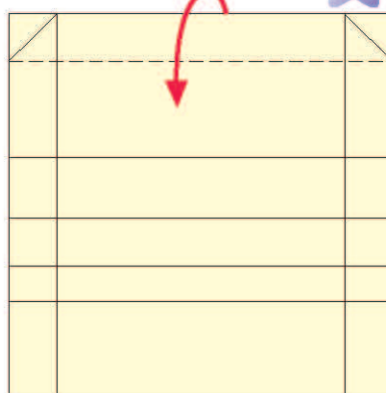
Take the pre-folded square, place it as shown.

Valley fold the right- and left-hand sides being guided by the intersections of the fold-marks and the top edge, as shown.



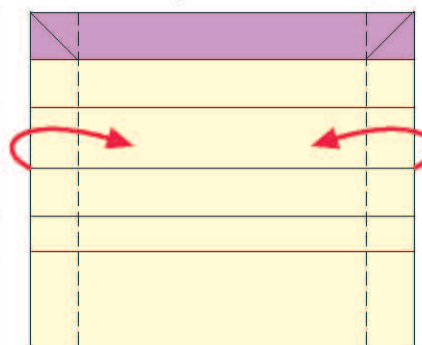
10

Valley fold the top horizontal section down as shown.



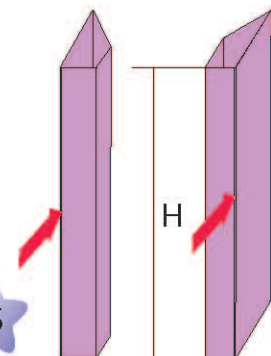
11

Valley fold the right- and left-hand sides along the existing fold-lines.



12

Note, the resulted distance (H) will be the height of the future frame, which is equal to the width (W) since we fold a square frame.



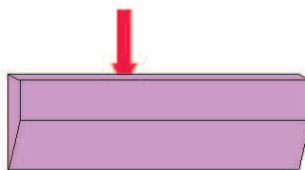
15

Make another one like this, so that you have 2 side planks.

The side plank is ready for the assembling.



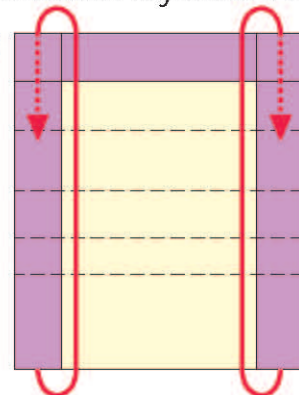
14



This should be the result. Note, there should be a slit between two layers at the bottom.

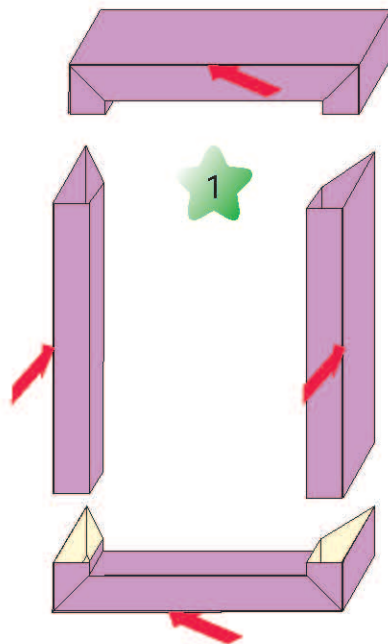
13

Along the exciting fold-lines, valley fold the horizontal sections, inserting the lower one between the layers of the top section.



Square Frame Assembly

Get ready the bottom plank, the top plank and 2 side planks.

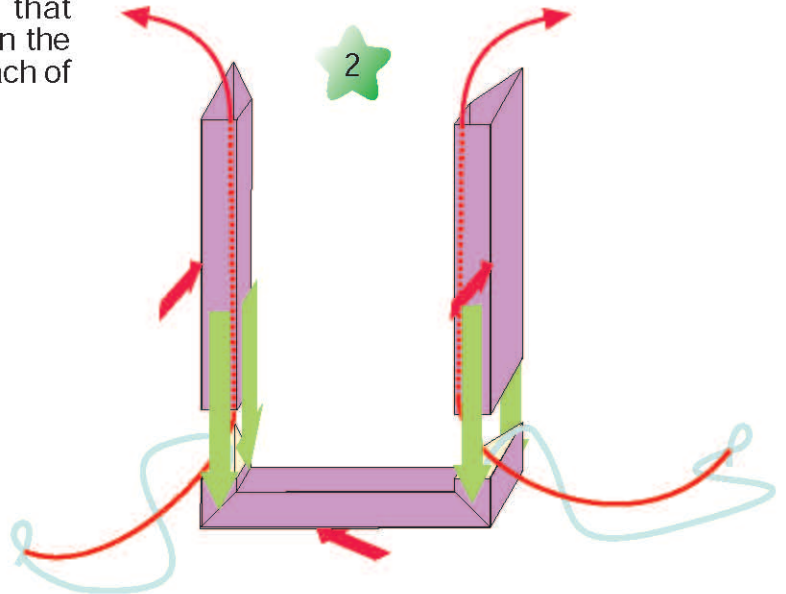


Place the bottom plank by the back side toward you, where there is a slit at the bottom and sides.

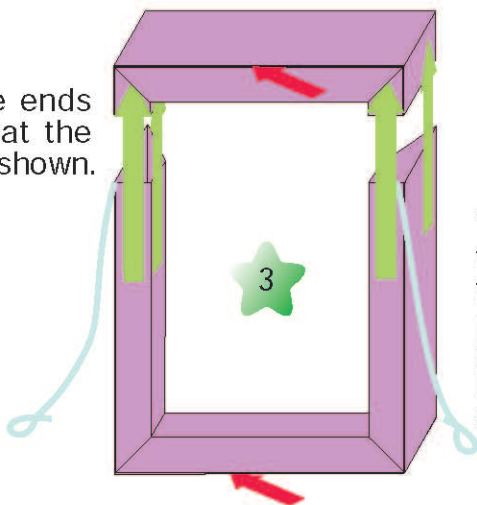
Take the side planks and also locate them as shown, so that there is a slit on the outer side of each of them.

If you are to integrate a piece of line into the frame for hanging purposes, then pass the ends of line through the side planks as shown (it might be easier to do, if you turn the construction over).

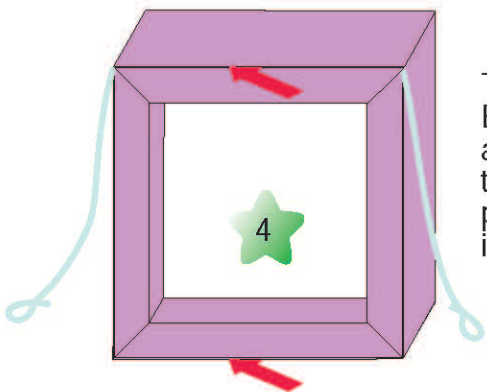
Consistently insert each side plank, sliding it down carefully between the layers of the bottom plank as shown.



Keep the ends of lines at the sides as shown.



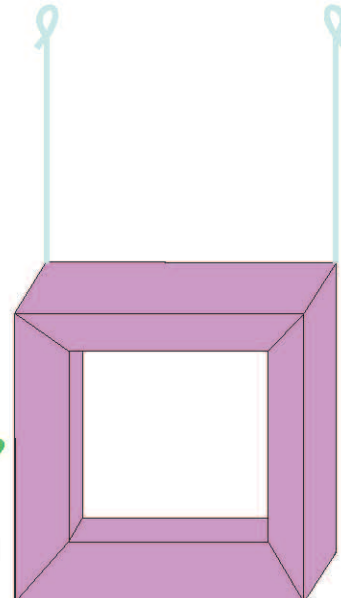
This should be the result. Now take the top plank by its back side with the slit and place it atop the side planks. Step-by-step, insert each side plank, sliding it carefully between the layers of the top plank as shown.



This should be the result. Be sure that you assembled all the planks correctly - there is a slit along the outer perimeter of the frame for inserting the back piece.



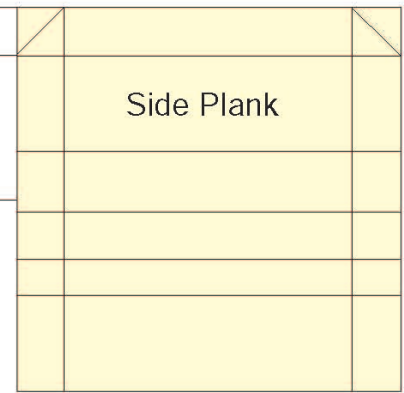
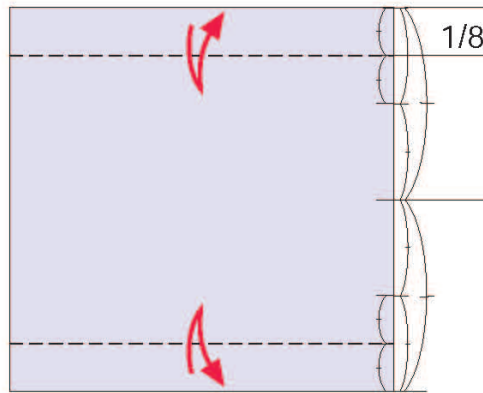
The frame is almost ready! Now we just need to add the back piece.



Back Piece

Use the 5th square for the back piece.

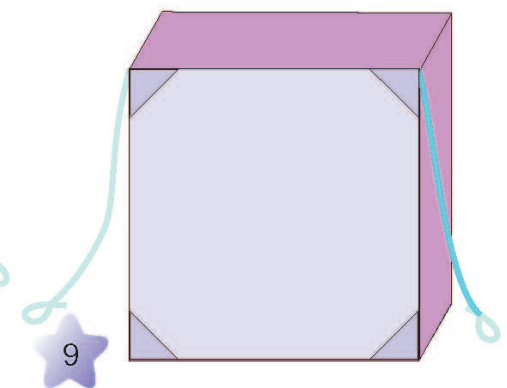
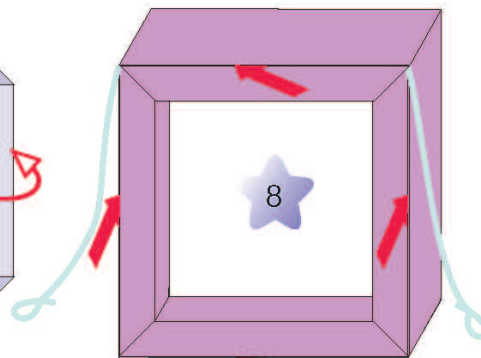
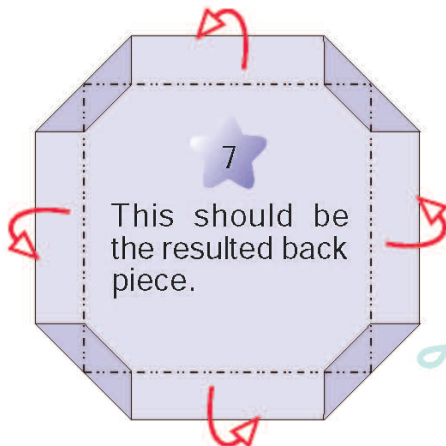
Valley fold the top edge exactly $\frac{1}{8}$ of the side of the square, which is equal to the upper section of the pre-folded sheet of the side plank as shown. Press the fold flat and unfold it. Repeat the same for the bottom part.



The following steps from 2 to 7 are folding in the same manner as it was shown for the back piece of the Middle Square Frame in the article 'Shadowbox Frame (Equilateral Triangle Profile)', article pages 9 to 10 (book pages 61 to 62).

Take the frame by its back side toward you and consistently insert the flaps of the back piece into the slits of the frame.

This should be the resulted back side of the frame.

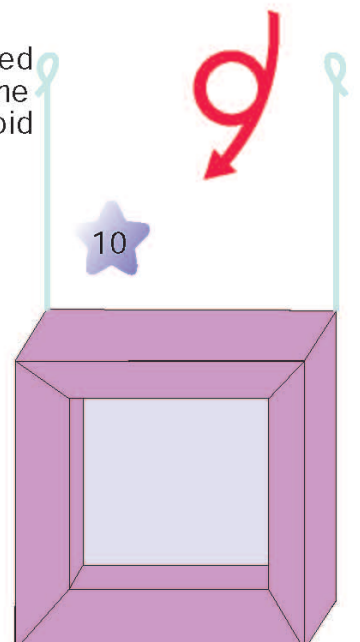


*Deep Square Frame
with Miniature Oribana
'Spring Pirouette'*



*Deep Square Frame
with an image*

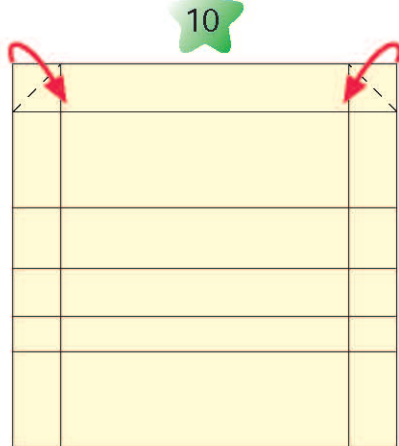
Here is the completed square shadowbox frame with the right trapezoid profile.



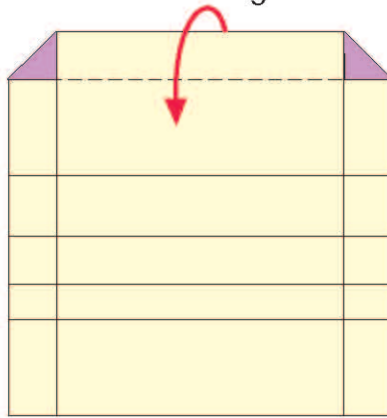
Side Plank for Rectangular Frame

Take the pre-folded square. For the rectangular frame we will use the full side of it.

Valley fold the upper corners along the adjacent fold-line, as shown.



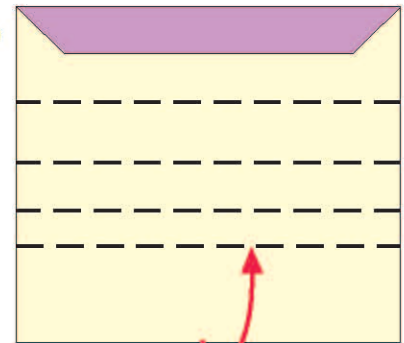
10



11

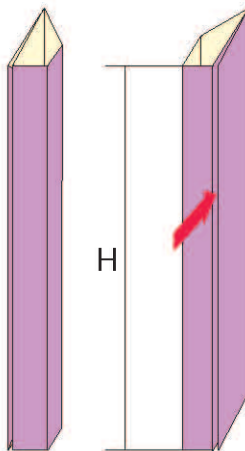
Valley fold the top horizontal section down as shown.

Along the exciting fold-lines, valley fold the horizontal sections into a tube with the right trapezoid profile.



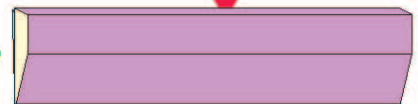
12

The side plank is ready for the assembling. Make another one like this, so that you have 2 side planks.



14

This should be the result. The side plank is not locked itself, but it will be locked during the frame assembly.



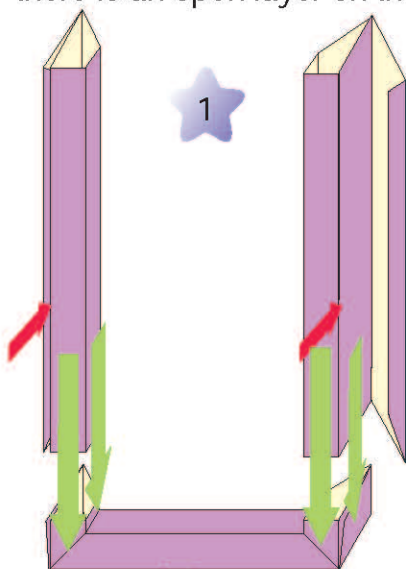
13

Rectangular Frame Assembly

Get ready the bottom plank, the top plank and 2 side planks.

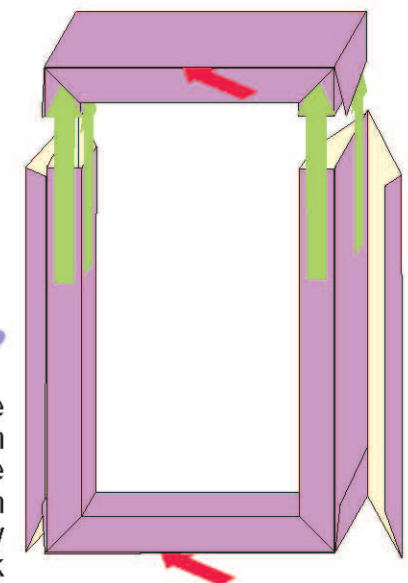
Place the bottom plank by the back side toward you, where there is a slit at the bottom and sides.

Take the side planks and also locate them as shown, so that there is an open layer on the outer side of each if them.



1

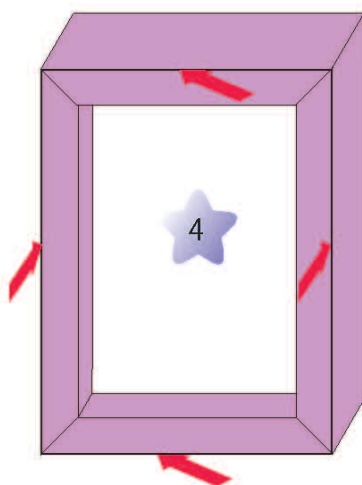
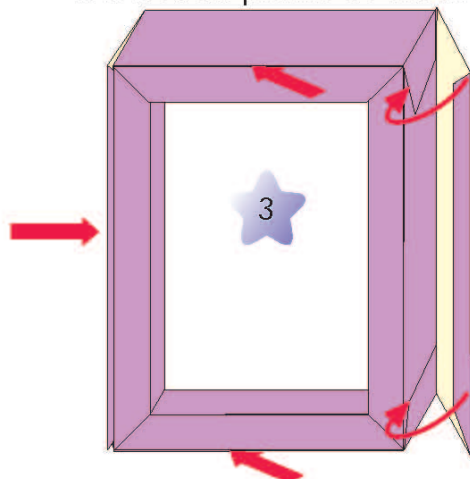
Consistently insert each side plank, sliding it down carefully between the layers of the bottom plank as shown in the next step.



2

This should be the result. Now take the top plank by its back side with the slit and place it atop the side planks. Step-by-step, insert each side plank, sliding it carefully between the layers of the top plank as shown.

This should be the result. Close each side plank, inserting the flap under the layers on the top and bottom planks as shown.



Note, there is a slit along the outer perimeter of the frame for inserting the back piece.



Here is the completed Rectangular Shadowbox Frame with the right trapezoid profile.

Now we just need to add a back piece. Follow suggestions in the article 'Back Piece' (book pages 123 to 126) to make a customized back piece for this frame.



*6-1/2x8-1/2" (16.5x21.5cm)
Deep Rectangular Frame made
out of 8-1/2" (21.5cm) squares.*

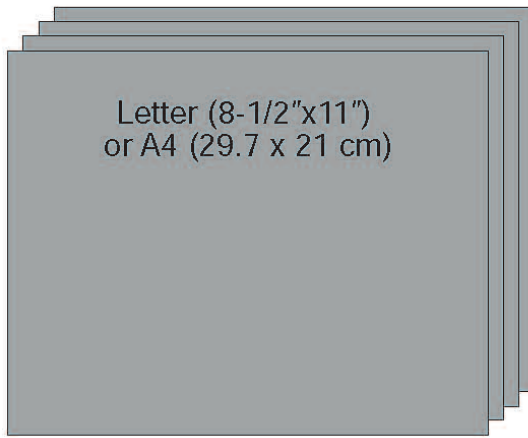


*Deep Rectangular
Frame with an image*

*Deep Rectangular
Frame with an image*

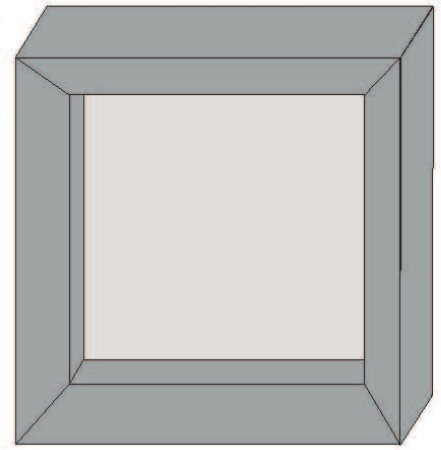


Deep Square Frame from Letter / A4 format

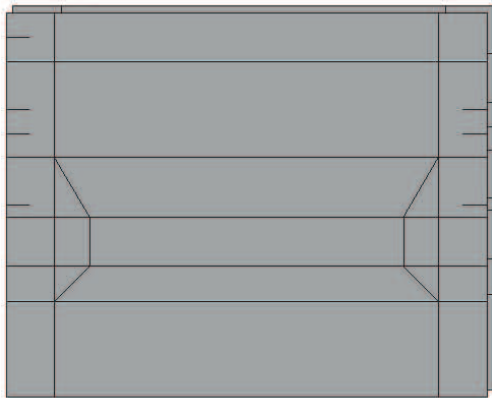


You may use sheets of paper of A4 (30x21 cm) or Letter (11x8.5 inches) format to make a rather large deep square frame with the right trapezoid profile.

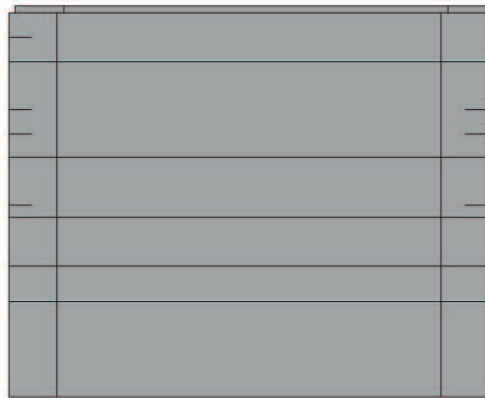
For instance, when using sheets of Letter format (11 x 8-1/2 inches), it will result in a 9-inch square frame with 7-inch square picture space, and frame's depth about 2-1/4 inches.



Top / Bottom Planks



Side Planks



Assembly

Fold top, bottom and side planks and then assemble them into a frame in the same way as shown for the Deep Square Frame from squares on pages 2 to 7 of this article (book pages 93 to 98).

To make a customized back piece for this frame, follow suggestions in the article 'Back Piece' (book pages 123 to 126).



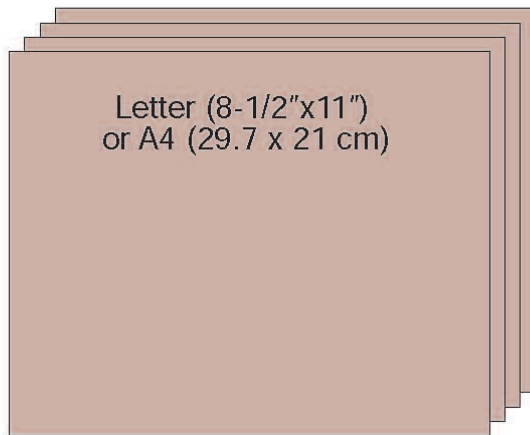
9" (23cm) Deep Large Square Frame made out of Letter format sheets (11x8-1/2" / 21.5x28cm)

Here is the completed Deep Square Frame with the right trapezoid profile.



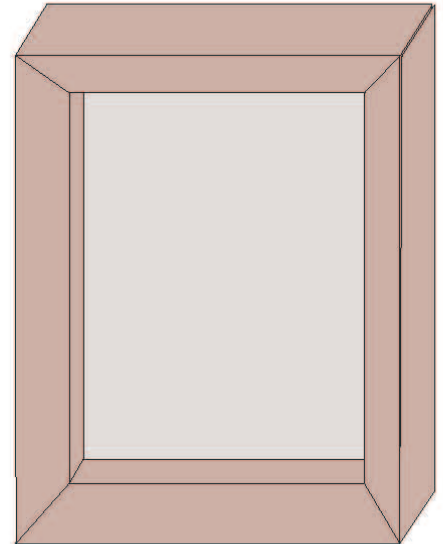
Deep Large Square Frame with Mini-Oribana 'Spring Breath'

Deep Rectangular Frame from Letter / A4 format

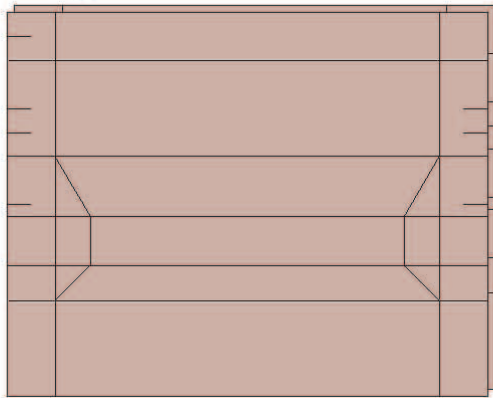


You may use sheets of paper of A4 (30x21 cm) or Letter (11x8.5 inches) format to receive a rather large deep rectangular frame with the right trapezoid profile.

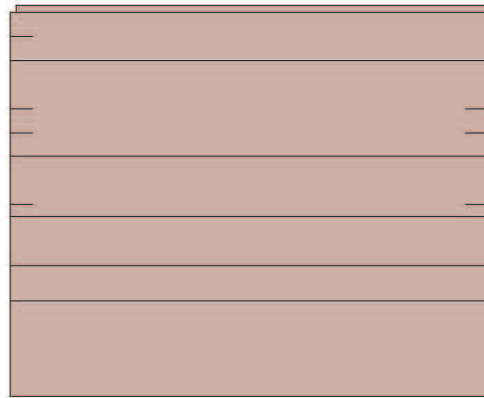
For instance, when using sheets of Letter format (11 x 8-1/2 inches), dimensions of the rectangular frame will be 11 x 9 inches with a 9-1/4 x 7 inches picture space and the frame's depth as 2-1/4 inches.



Top / Bottom Planks



Side Planks



Assembly

Fold top, bottom and side planks and then assemble them into a frame in the same way as shown for the Deep Rectangular Frame from squares on pages 2 to 9 of this article (book pages 93 to 100).



Here is the completed Deep Rectangular Frame with the right trapezoid profile.

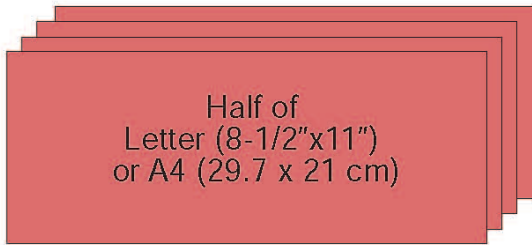
To make a customized back piece for this frame, follow suggestions in the article 'Back Piece' (book pages 123 to 126).

11x9" (28x23cm) Deep Large Rectangular Frame made out of Letter format sheets (11x8-1/2" / 28x21.5cm)

Deep Large Rectangular Frame with Mini-Oribana 'Awaiting'



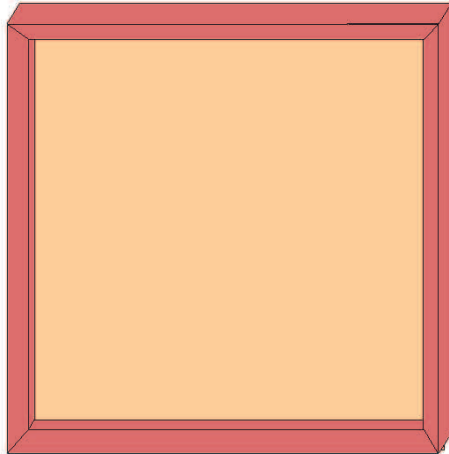
Shallow Square Frame from Half of Letter / A4



To fold a shallow slim square frame with the right trapezoid profile, use long halves of sheets of paper of A4 (30x21 cm) or Letter (11x8.5 inches) format.

For instance, when using sheets of Letter format (11 x 8-1/2 inches), it will result in a 10-inch square frame with 9-inch square picture space, and frame's depth about 1 inch.

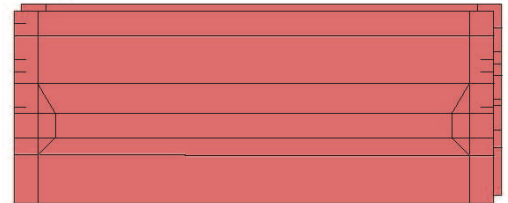
Fold top, bottom and side planks and then assemble them into a frame in the same way as shown for the Deep Square Frame from squares on pages 2 to 7 of this article (book pages 93 to 98).



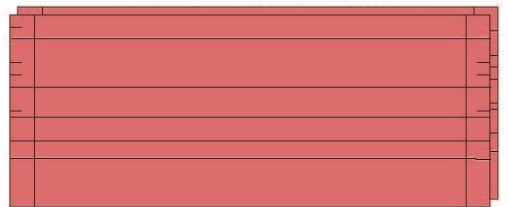
Here is the completed Shallow Square Frame with the right trapezoid profile.

To make a customized back piece for this frame, follow suggestions in the article 'Back Piece' (book pages 123 to 126).

Top / Bottom Planks



Side Planks



10" (25cm) Shallow Large Square Frame made out of 11x4.25" (28x10.8cm) rectangles, which is the half of Letter format



*Deep Shadowbox Frames with
Right Trapezoid Profile*



*Congratulations! Now you
may fold the various shapes
& sizes of shadowbox frames
with the right trapezoid
profile. This frame is great for
displaying images and
artworks. Enjoy!*





Deep Shadowbox Frame (Stairs Profile)

by Yuri Shumakov

This is a complex and attractive design of a deep shadowbox frame with the stairs-like profile that creates a fabulous display with a good stair-step depth. The frame itself folds from 4 modules. It's wonderful for displaying pictures and small artworks.



Stairs Profile

You will need 4 identical rectangles, one for each side, and 1 piece of paper for the back side. The various proportions of the original rectangle will result in different variations of the frame. For instance, using squares will result in a very tubby frame with a tiny picture space for displaying a miniature artwork. When using rectangles of somewhat 2:3 in proportions (like Letter or A4 formats) it will yield a cute deep frame with a small picture space. Using rectangles of about 1:3 in proportions will result in an elegant frame with a decent picture space.



6-3/4" (17cm) Square Frame
made out of Letter format
sheets (11x8-1/2" / 28x21.5cm)



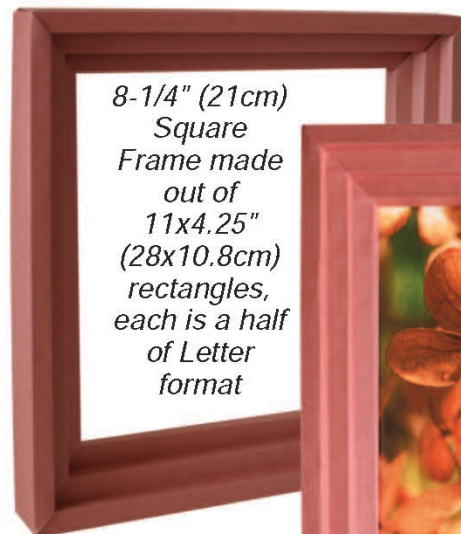
4-1/4" (11cm) Square
Frame made out of
8-1/2" (21.5cm) squares

Suggested sizes: You may use sheets of regular formats of A4 (30x21cm) or Letter (11x8.5 inches) as well as to make necessary rectangles or your frame from them.

Suggested paper: Paper should be strong and relatively thick. Copy paper works quite well. You may use various craft paper as well.



6-3/4x10" (17x25cm)
Rectangular Frame made
out of Letter format sheets
(11x8-1/2" / 28x21.5cm)



8-1/4" (21cm)
Square
Frame made
out of
11x4.25"
(28x10.8cm)
rectangles,
each is a half
of Letter
format

Suggested colours: It can be any colour you wish. It's good to use a lighter shade for the background.



8-1/4x10-1/4" (21x26cm) Rectangular
Frame made out of 11x4.25"
(28x10.8cm) rectangles, each is a
half of Letter format

Deep Square or Rectangular Frame from Letter / A4

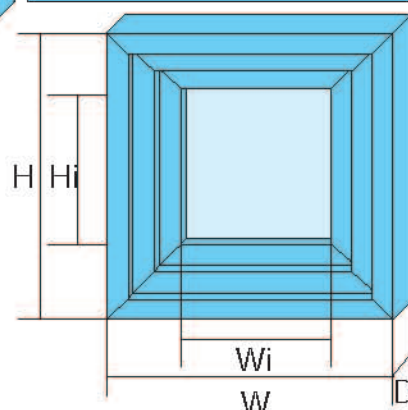
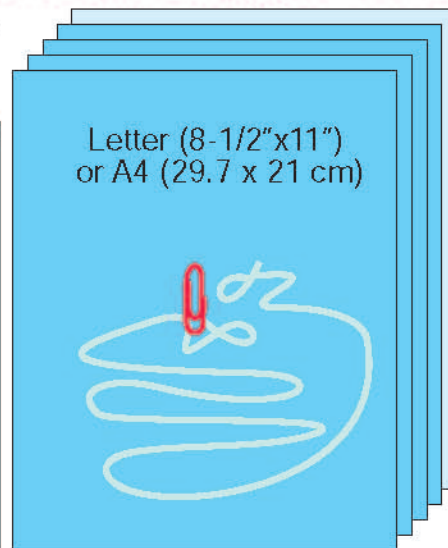
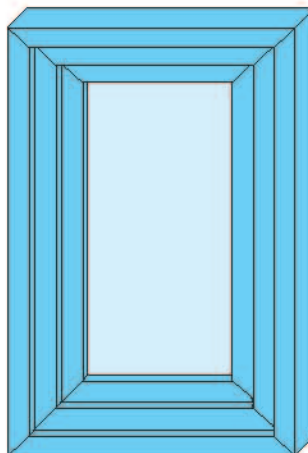
Using the same set of rectangles of Letter or A4 format you can fold a cute deep square frame with the stairs profile or a rectangular frame, when the length of the side planks is adjusted.

When using sheets of Letter format (11 x 8-1/2 inches), it will result in a 6-3/4-inch square frame with 3-5/8-inch square picture space, and frame's depth about 1-5/8 inches. In case of the rectangular frame, its dimensions will be 6-3/4x10 inches with a 3-5/8 x 6-3/4 inches picture space and the frame's depth as 1-5/8 inches.



Deep Rectangular Frame with an image & Origami Hot Air Balloon

Deep Square Frame with Origami Snowflake



W - width
Wi - picture, width
H - height
Hi - picture, height
D - depth

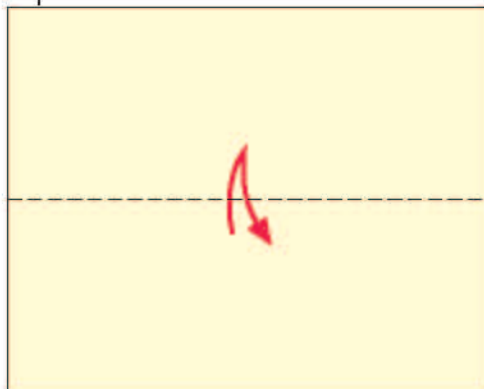
Optionally, for a hanger prepare a piece of line or thread that in length is a bit longer than the frame's perimeter. Fishing line works well for it. The line can be integrated into the frame during folding in the same manner as it's shown in the article 'Deep Shadowbox Frame (1:2 Rectangle Profile, 4 Modules)'.

For the frame we will need 1 top plank, 1 bottom plank and 2 side planks. All the planks share the first 7 steps of pre-folding and then fold differently.

Plank Pre-Folding

If using two-colour paper, begin with coloured side down.

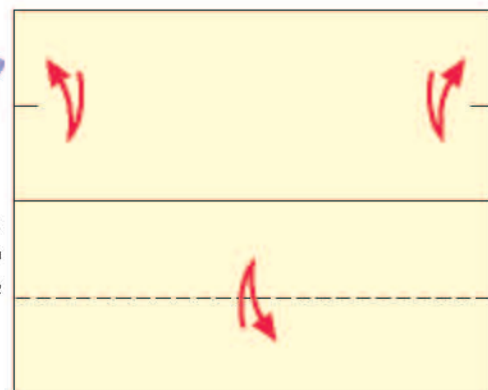
Place the rectangle lengthwise. Valley fold it in half from bottom to top. Press it flat and unfold it.



1

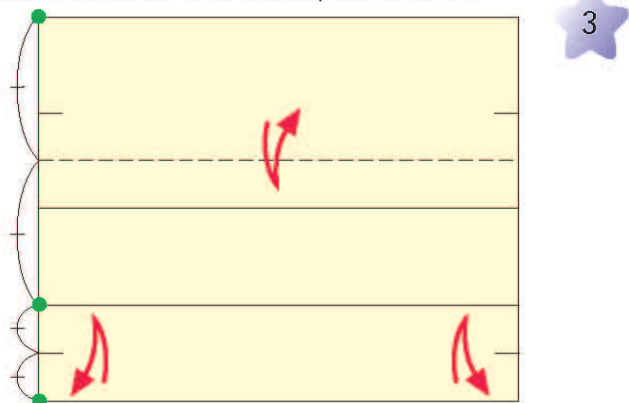
Valley fold the top edge to meet the horizontal middle fold-line, but do not press it completely flat, just make the small fold-marks on the sides, as shown.

2

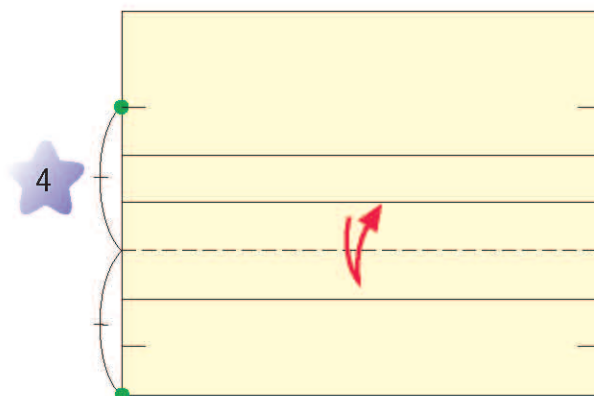


Then valley fold the bottom edge to meet the middle fold-line. Press it flat and unfold it.

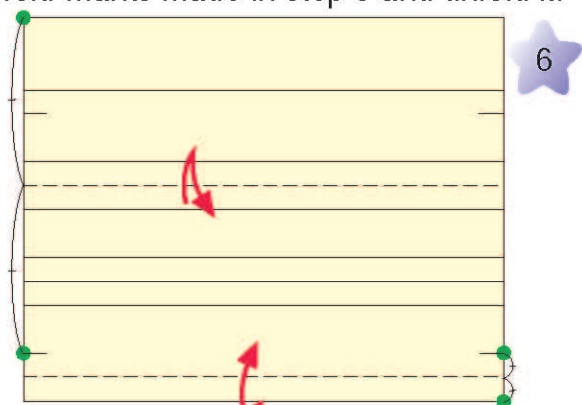
Valley fold the top edge down to meet the fold-line made in the previous step as shown by the dots. Then, valley fold the bottom edge up to meet the same fold-line, but do not press it completely flat, just make the small fold-marks on the sides, as shown.



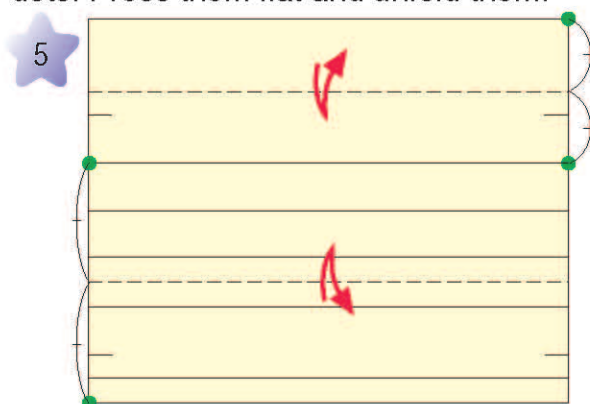
Valley fold the bottom edge up to meet the fold-marks made in step 2. Press it flat and unfold it.



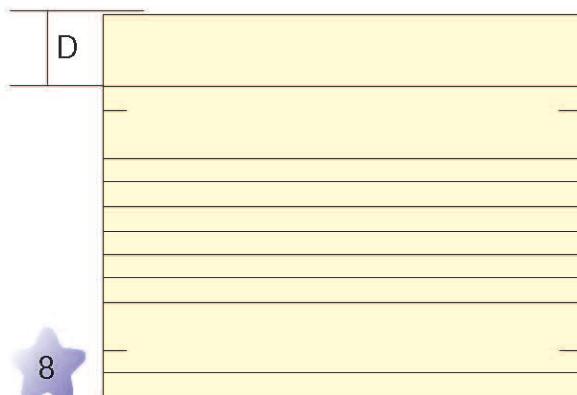
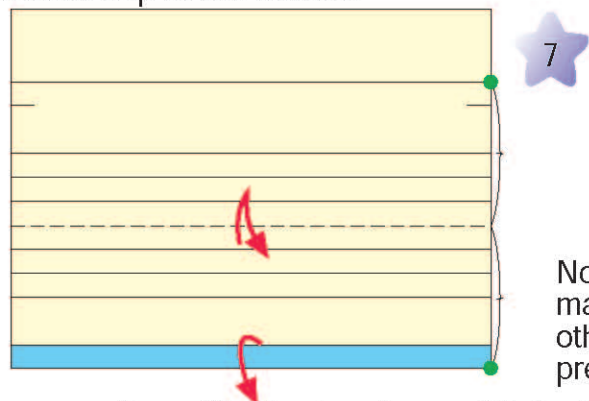
Valley fold the bottom edge up to meet the fold-marks made in step 3. Then, valley fold the top edge down to meet the same fold-marks made in step 3 and unfold it.



Valley fold the top and bottom edges to meet the fold-line made in step 3 as shown by the dots. Press them flat and unfold them.



First, valley fold the bottom edge up to meet the fold-line made in step 5 as shown by the dots. Press it flat and unfold it. Then, unfold the narrow flap at the bottom.

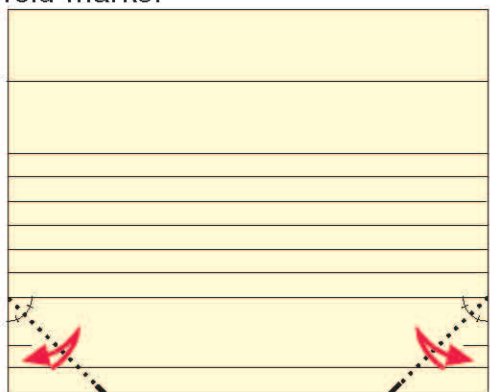


Now we have a pre-folded paper for a frame plank, no matter it's a side, top or bottom plank. So, pre-fold other rectangles in the same way, so that you have 4 pre-folded squares for all the planks.

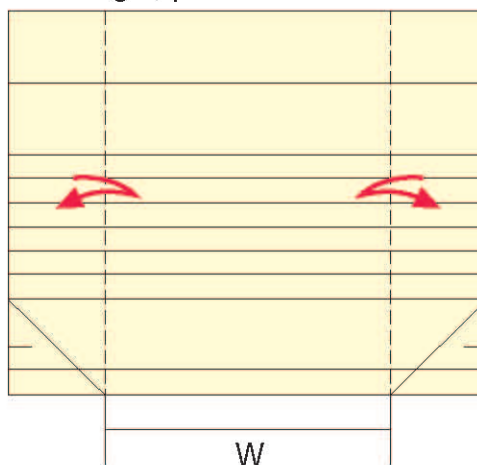
Top / Bottom Plank

Take the pre-folded rectangle, place it as shown.

Working with the lower corners, valley fold and unfold each of them along the adjacent fold-line, as shown, thereby making the diagonal fold-marks.



8

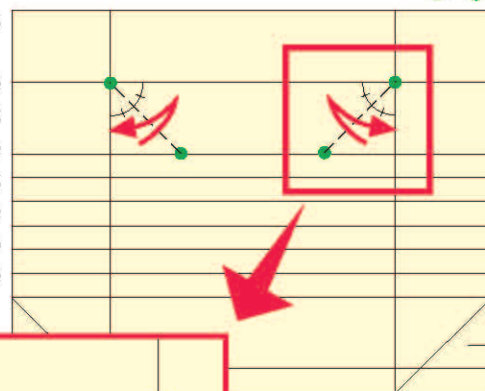


9

Valley fold the right- and left-hand sides being guided by the intersections of the fold-marks and the bottom edge, as shown. Press the folds flat and unfold them.

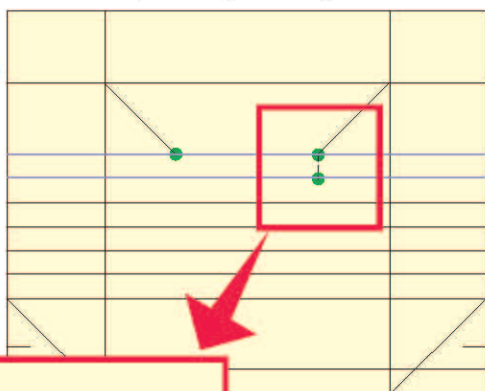
10

The following folding is determining the stair-step structure of the future frame, so it's crucial to be as precise with fold-marking as possible. You may use a pencil and a ruler to mark the lines before actual folding.

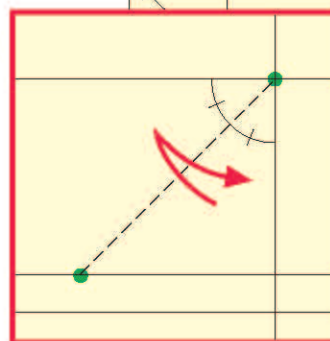


This should be the result. Now in the next (down) narrow horizontal section we have to make the limited vertical fold-line by valley folding, as shown.

12



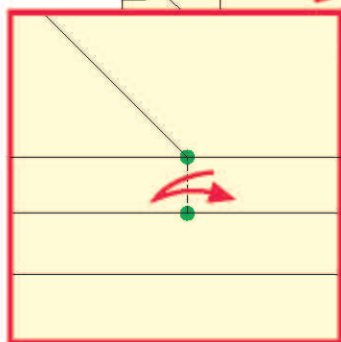
11



Working with the marked horizontal section, the 2nd from the top, by valley folding, make the limited diagonal fold-lines as shown.

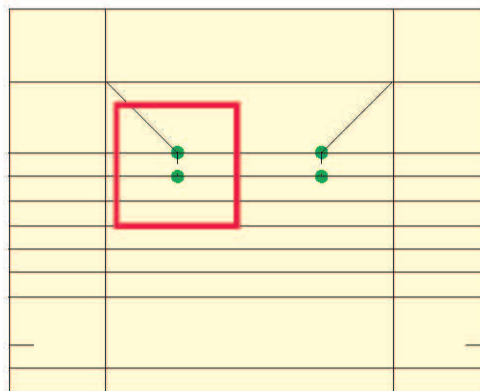
Enlargement of the marked area. Note that the diagonal fold-line is limited as shown by the dots.

13



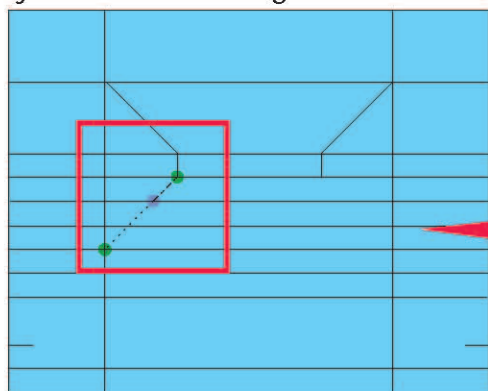
Enlargement of the marked area. Note, when you make this limited fold-mark, folding the paper from the side to side over the intersections of the lines, the horizontal lines have to coincide.

14



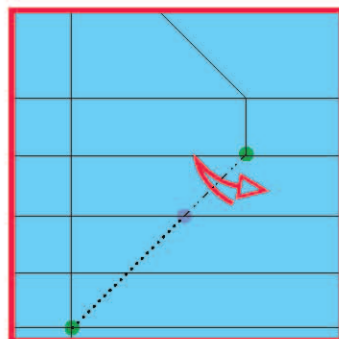
Repeat steps 12-13 for the other side. Then, turn the paper over from side to side.

Now we'll work with the marked area and will do the following fold-marks by 'mountain' folding.



15

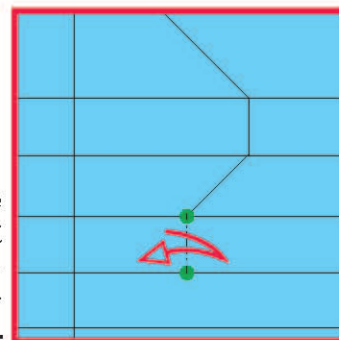
Enlargement of the marked area. By 'mountain' folding, make the fold-line connecting the green dots, but do not press it completely flat, just make the limited fold-line in one section as shown.



16

In the marked area, find the 2 intersections of the fold-lines marked by the green dots: 1) the upper one of the fold-mark made in the step 14 and the horizontal line below it; 2) the other intersection, 3 horizontal sections lower, of the vertical and horizontal lines as shown.

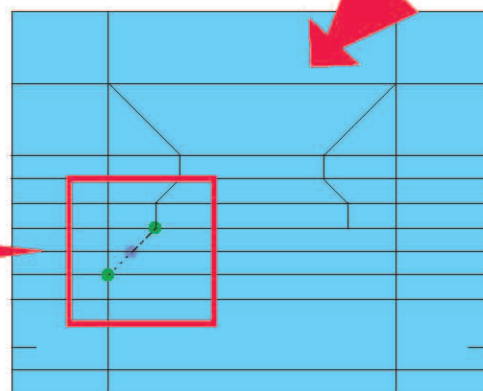
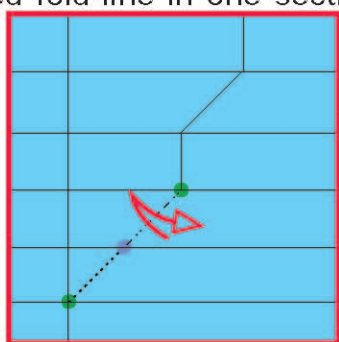
This should be the result. Now in the next horizontal section, make the limited vertical fold-line as shown.



17

Enlargement of the marked area. By 'mountain' folding, make the fold-line connecting the green dots, but do not press it completely flat, just make the limited fold-line in one section as shown.

19

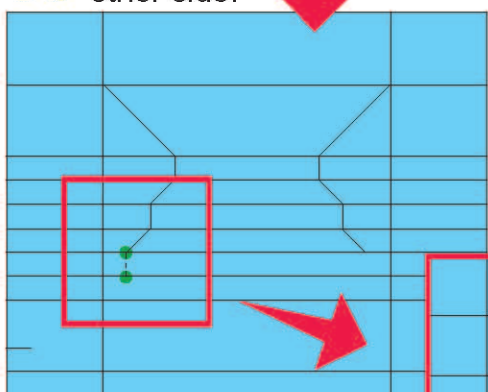


Repeat steps 16-17 for the other side.

18

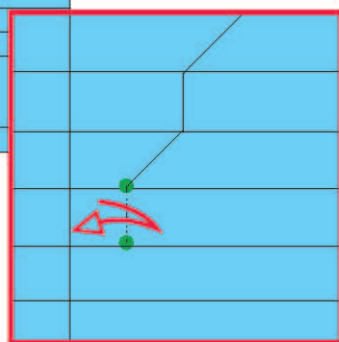
Repeat step 18 for the other side.

Now in the marked area, find the 2 intersections of the fold-lines marked by the green dots: 1) the upper one of the fold-mark made in the step 17 and the horizontal line below it; 2) the other intersection, 2 horizontal sections lower, of the vertical and horizontal lines as shown.

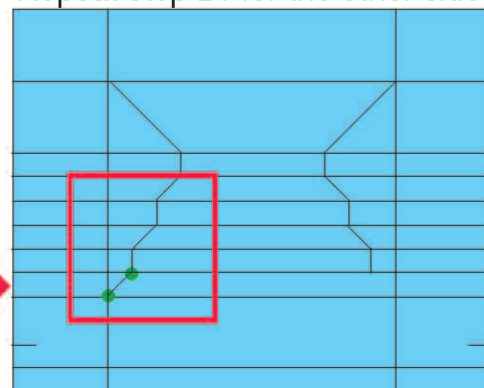


Now in the next horizontal section, make the limited vertical fold-line as shown.

21



Repeat step 21 for the other side.

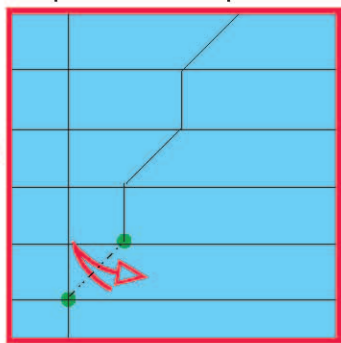


Now in the marked area, find the 2 intersections of the fold-lines marked by the green dots.

22

Enlargement of the marked area. By 'mountain' folding, make the fold-line connecting the green dots, making the limited fold-line in one section as shown. Repeat this step for the other side.

23

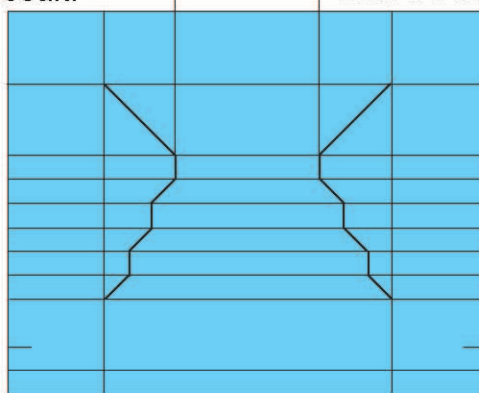


This should be the result.

Wi

It will be the picture width (Wi) of the future frame.

24

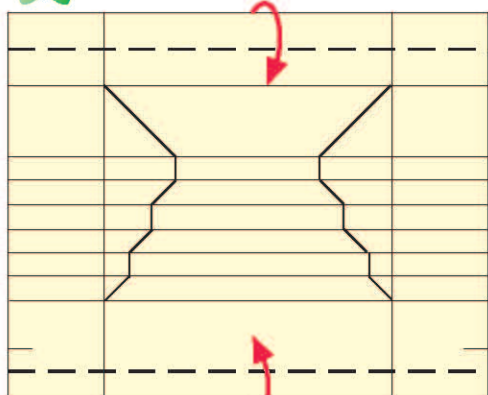


Check all the fold-lines and re-fold the creases into 'mountains' and 'valleys' as shown. Then, turn the paper from side to side.

25

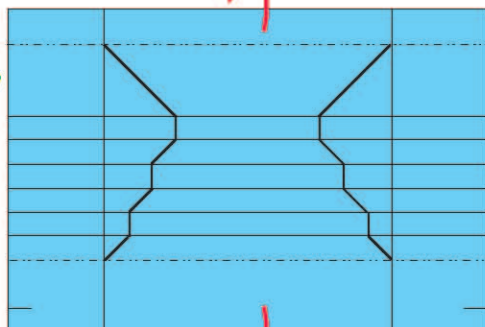
Valley fold the upper horizontal section in half. And along the existing fold-line, valley fold the bottom horizontal section up as shown.

26



Then, turn the paper from side to side.

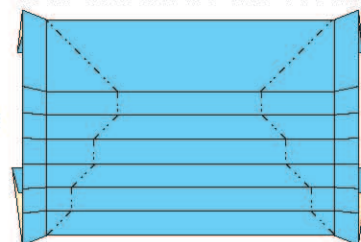
27



Mountain fold the upper and lower horizontal sections back as shown.

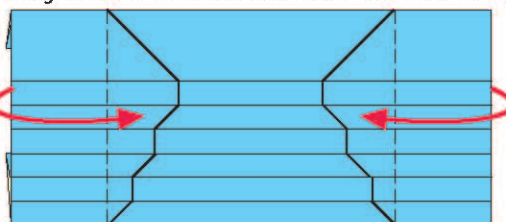
This should be the result.

29

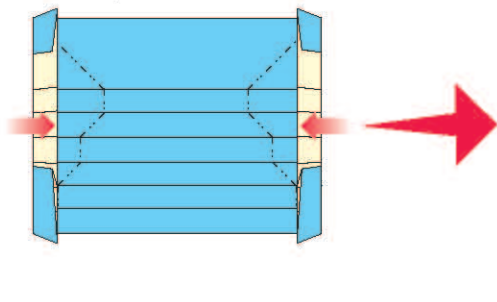


Valley fold the side vertical sections up.

28

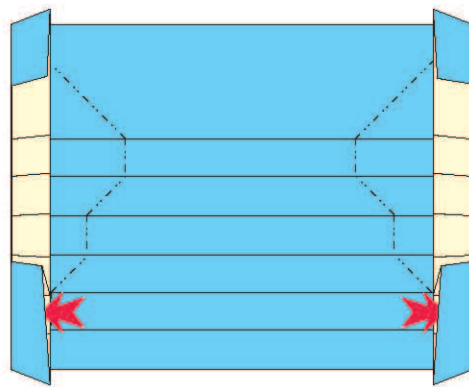


30 Push the side flaps a bit more.



31

Separate the layers of the side flaps at the bottom as shown.



Now we will work starting from the bottom and consistently for the left and right sides.

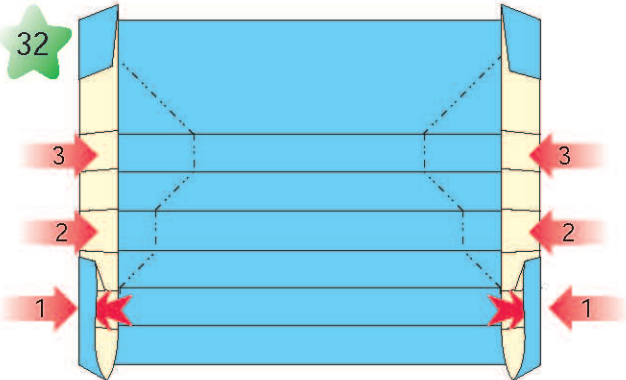
1) Inserting the finger between the layers of the side flap, shape the first stair-step from one side along the existing fold-lines. Then repeat it for the other side.

2) Pushing the side flap, shape the second stair-step from one side along the existing fold-lines. Then repeat it for the other side.

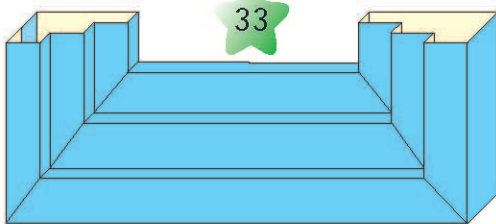
3) And then shape the third stair-step along the existing fold-lines for each side.

Therefore, making 3 stair-steps, you shape the paper along the existing fold-lines into the position shown in the next step.

32

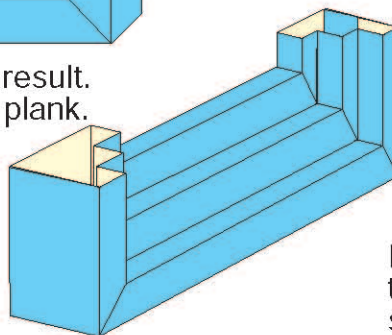


Note, the back flaps overlap each other at the bottom of the resulted shape. Make sure that the narrow flap goes inside the model, so that you will see the slit from the back side of the resulted plank.



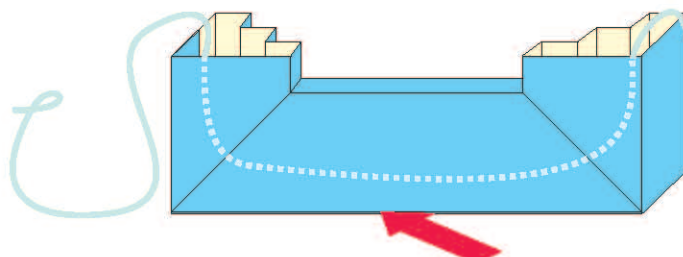
This should be the result.
The front side of the plank.

35

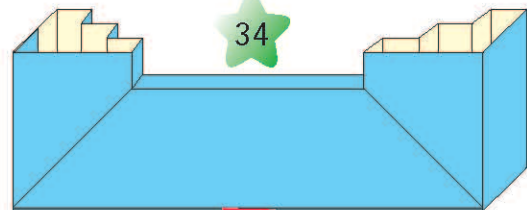


In this way there should be formed the top plank and the bottom plank.

Bottom Plank



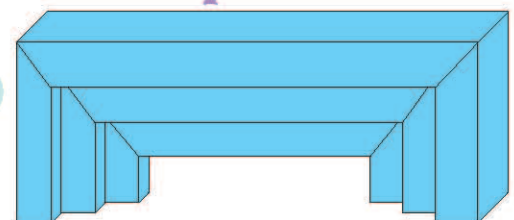
34



Back side. Note that there are two layers at the bottom and sides, so that you can see the slits that we will position to be on the back of the frame, when time comes.

Top Plank

36

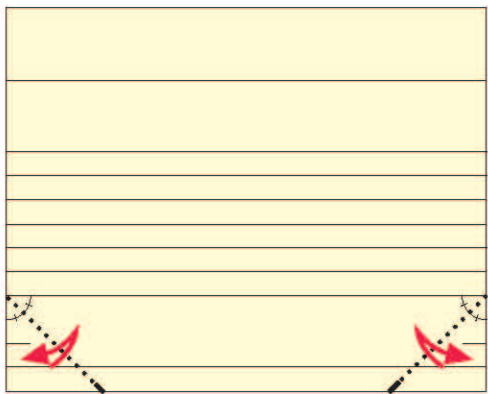


If you are going to integrate a piece of line into the frame for hanging, then in this step, working with the bottom plank, insert the piece of line into it as shown.

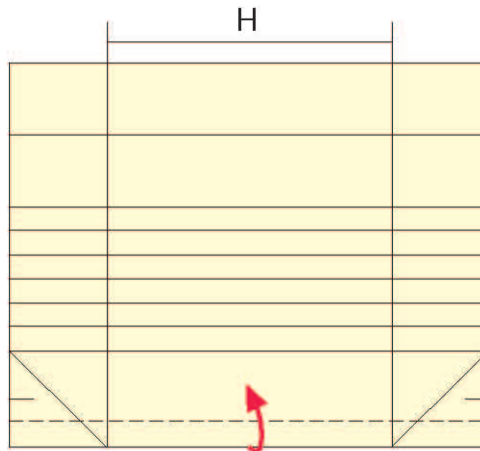
Side Plank for Square Frame

Take the pre-folded rectangle, place it as shown.

Working with the lower corners, valley fold and unfold each of them along the adjacent fold-line, as shown, thereby making the diagonal fold-marks.



8

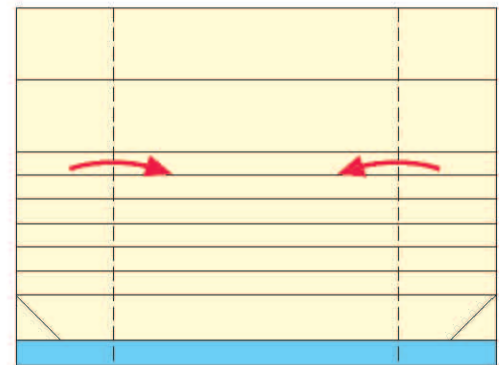


Valley fold the bottom horizontal section up along the existing fold-line.

9

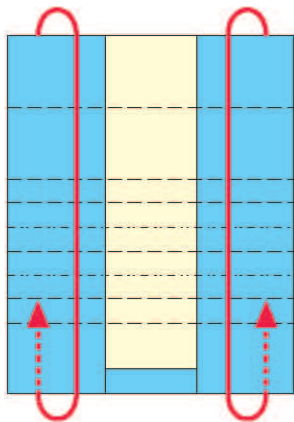
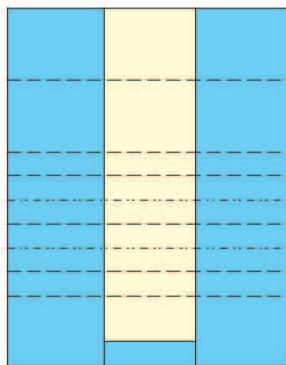
Valley fold the right- and left-hand sides along the existing fold-lines.

10



Along the existing fold-lines, re-fold 'valley' and 'mountain' creases as shown.

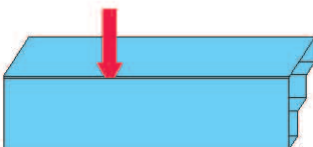
11



12

Along the existing fold-lines, fold the horizontal sections, inserting the upper one between the layers of the lower section.

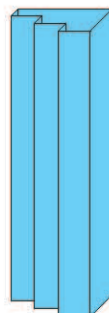
Note, the resulted distance (H) will be the height of the future frame, which is equal to the width (W) since we fold a square frame.



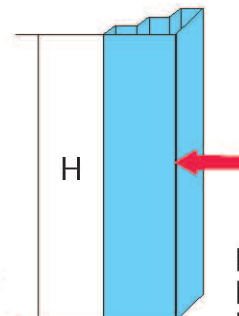
13

This should be the result
Note, there should be a slit between two layers at the top, as shown.

The side plank is ready for the assembling.



14

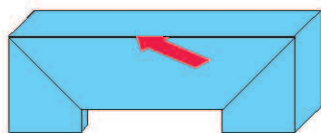


15

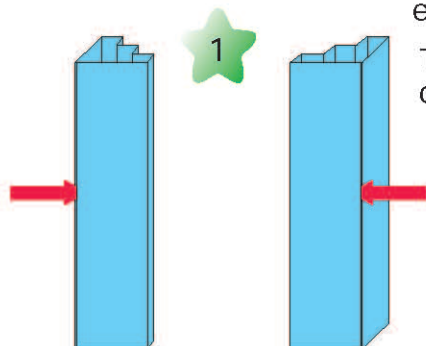
Make another one like this, so that you have 2 side planks.

Square Frame Assembly

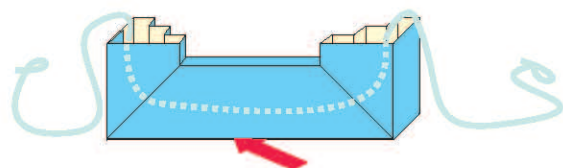
Get ready the bottom plank, the top plank and 2 side planks.



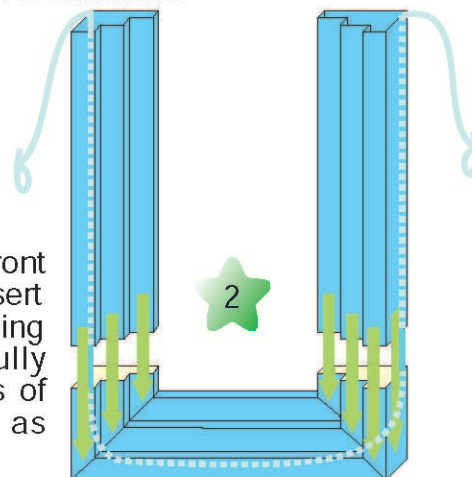
Place the bottom plank by the back side toward you, where there is a slit at the bottom and sides. Take the side planks and also locate them as shown, so that there is a slit on the outer side of each of them and it goes along the backside.



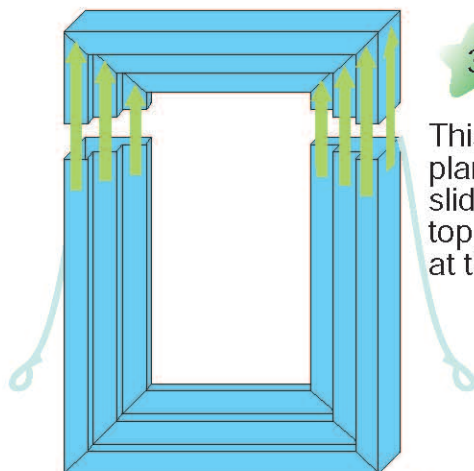
Turn the construction over from side to side.



Working from the front side, consistently insert each side plank, sliding it down carefully between the layers of the bottom plank as shown.

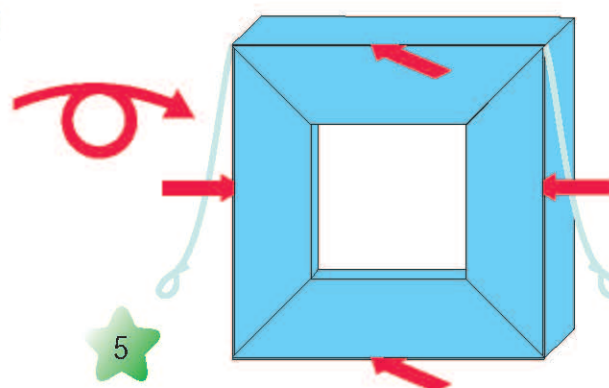
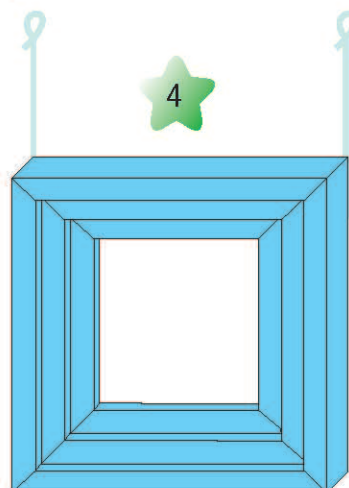


If you are to integrate a piece of line into the frame for hanging purposes, then pass the ends of line through the side planks as shown (it might be easier to do, if you turn the construction over for this).



This should be the result. Now take the top plank. Step-by-step, insert each side plank, sliding it carefully between the layers of the top plank as shown. Keep the ends of lines at the sides as shown.

The frame is almost ready! Now we just need to add the back piece.



The back side of the frame. Be sure that you assembled all the planks correctly, so that there is a slit along the outer perimeter of the frame for inserting the back piece.

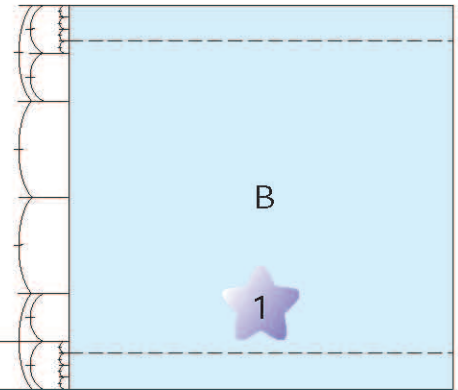
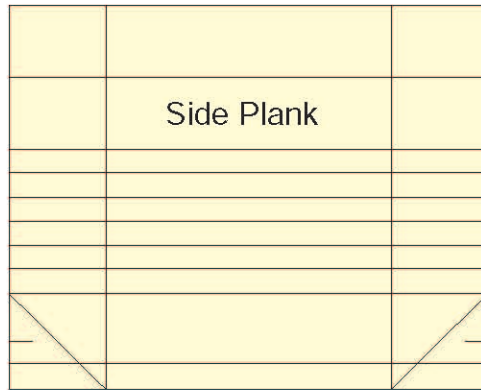
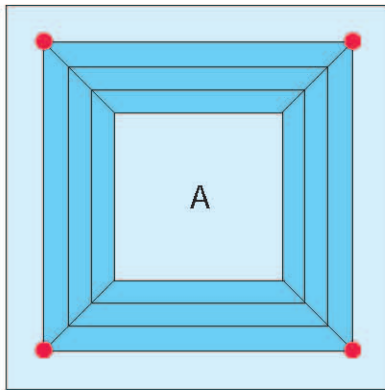
Back Piece

Use a square, the side of which is equal to the short side of the rectangle used for a plank.

To mark the needed fold-lines, you may:

A) position the frame exactly in the middle of the square and using a pencil mark the corners of the frame on the square by the dots. Then make the fold-lines connecting the dots and jump to step 6.

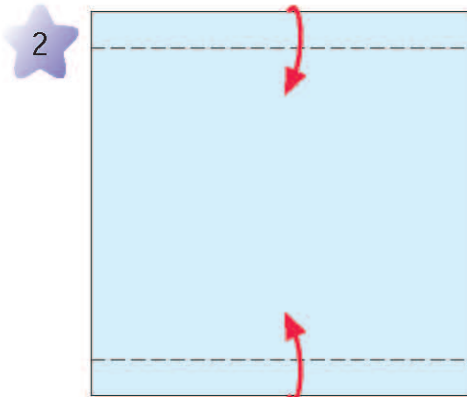
B) do the markings as shown starting from step 1.



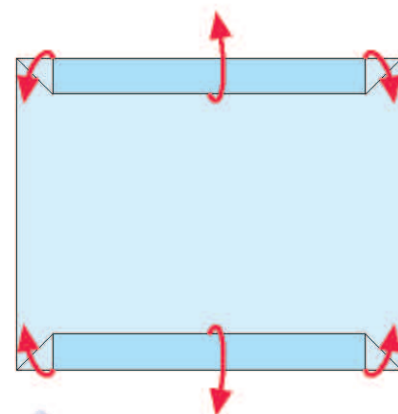
Valley fold the side corners of the narrow flaps as shown.



Valley fold the top and bottom edges along the resulted fold-lines.

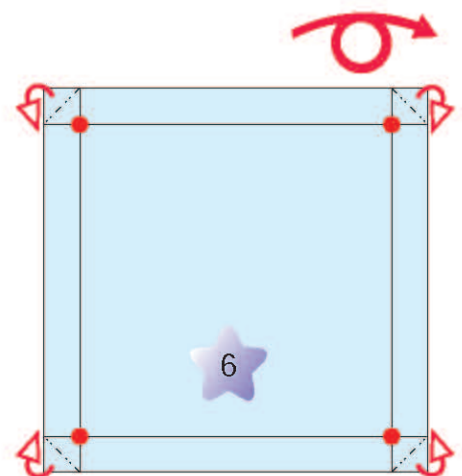
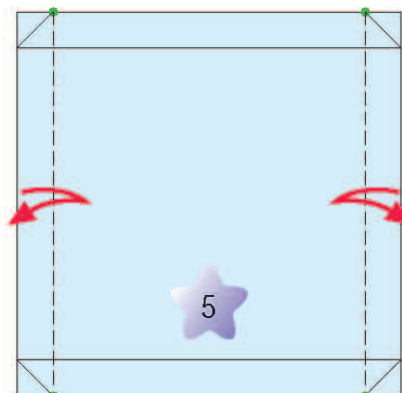


From the top, measure the distance of $1/8$ of the side of the square, then measure $3/4$ of this distance and make a valley fold-line. Repeat from the bottom part.



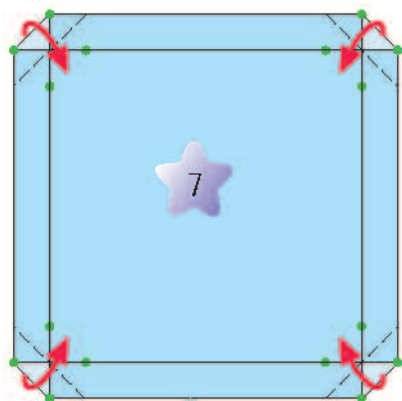
4 Unfold corners and the narrow flaps.

Being guided by the intersections of the diagonal fold-marks and top and bottom edges, valley fold and unfold the side edges as shown.

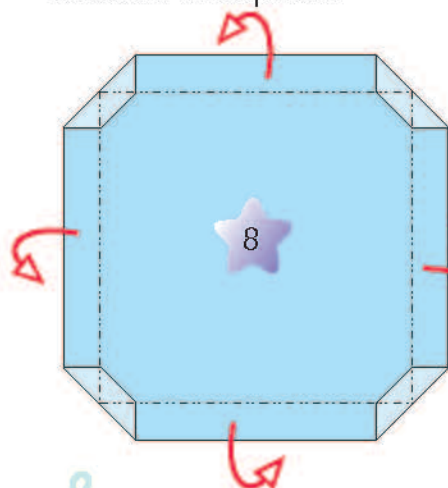


Mountain fold the corners along the existing diagonal fold-marks. Then, turn the paper over.

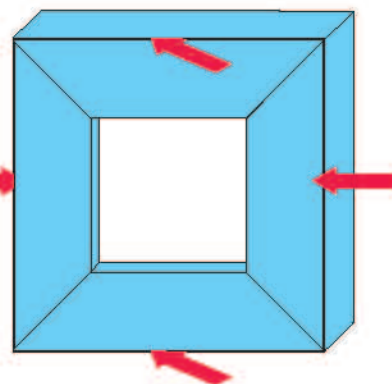
Working with 4 corners, consistently valley fold each of them so that it touches the fold lines in places marked by the dots.



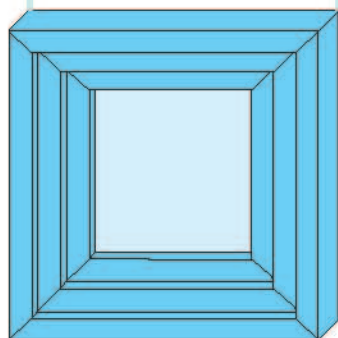
Mountain fold the outer flaps as shown. This should be the resulted back piece.



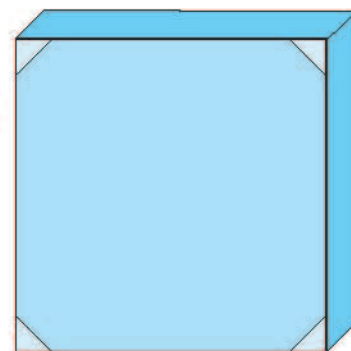
Take the frame by its back side toward you and consistently insert the flaps of the back piece into the slits at the outer perimeter of the frame.



Note, that the side slits are going along the surface of the backside as the frame turned to you; the top and bottom slits are going along the perpendicular surface.



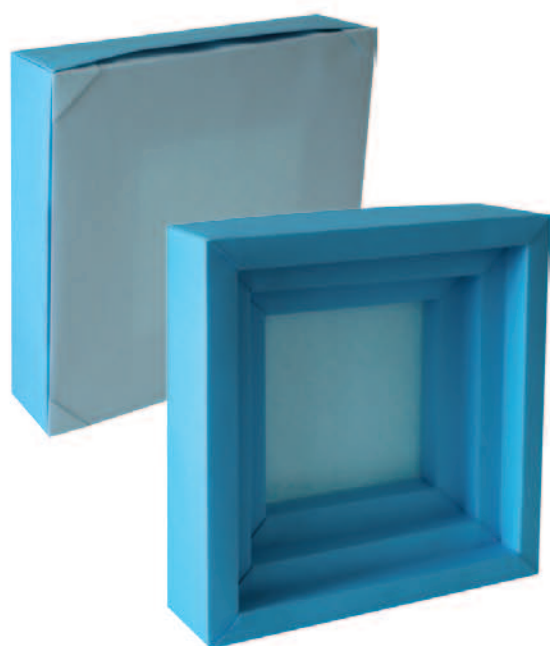
This should be the resulted back side of the frame.



10

Here is the completed Square Shadowbox Frame with the stairs profile.

9



Deep Square Frame with Origami Angler Fish

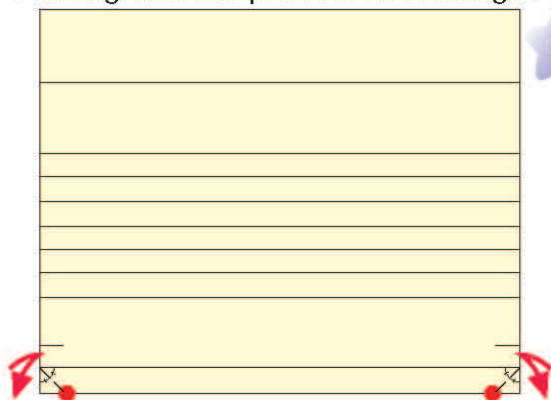
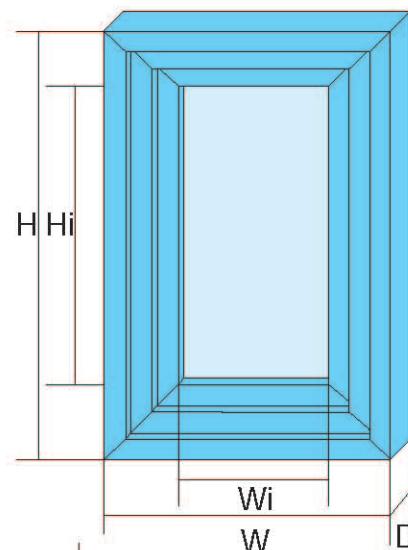
6-3/4" (17cm) Square Frame made out of Letter format sheets (11x8-1/2" / 28x21.5cm)



Side Plank for Rectangular Frame

Using the same set of rectangles of Letter or A4 format you can fold not only a deep square frame with the stairs profile, but also a rectangular frame. To do that we will adjust the length of the side planks.

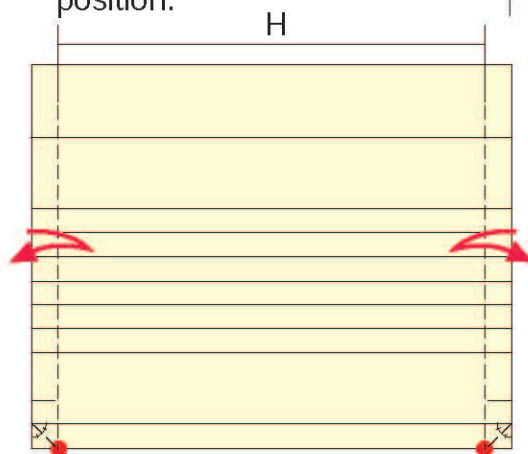
Starting with the pre-folded rectangle, place it as shown.



8

The resulted distance in the middle (H) will be the height of the future rectangular frame, assuming its portrait position.

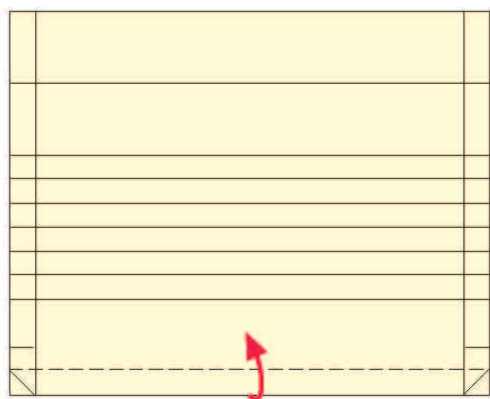
Working with the lower corners, valley fold and unfold each of them along the adjacent fold-line, as shown, thereby making the diagonal fold-marks.



9

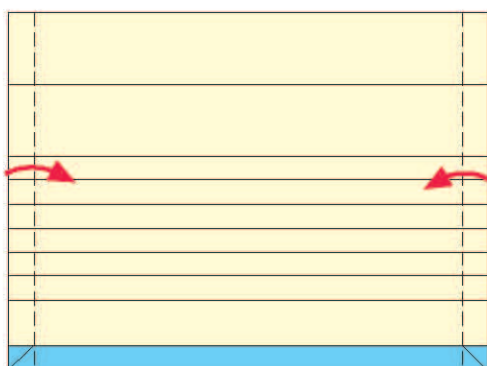
You always can adjust the length of the side planks to your liking to get a custom sized rectangular frame.

Valley fold the right- and left-hand sides being guided by the intersections of the fold-marks and the bottom edge, as shown. Press the folds flat and unfold them.



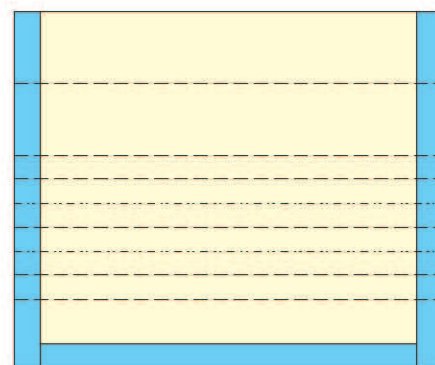
10

Valley fold the bottom horizontal section up as shown.



11

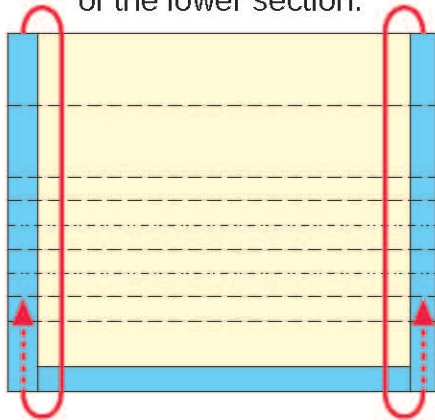
Valley fold the right- and left-hand sides along the existing fold-lines.



12

Along the exciting fold-lines, re-fold 'valley' and 'mountain' creases as shown.

13 Along the exciting fold-lines, fold the horizontal sections, inserting the upper one between the layers of the lower section.

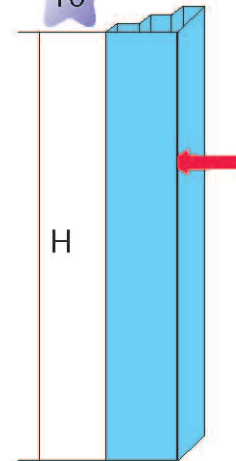


The side plank is ready for the assembling.

15

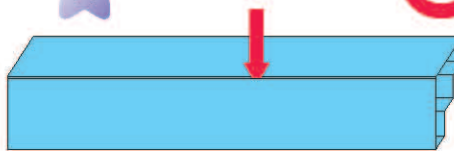


16



This should be the result
Note, there should be a slit between two layers at the top, as shown.

14



Make another one like this, so that you have 2 side planks.

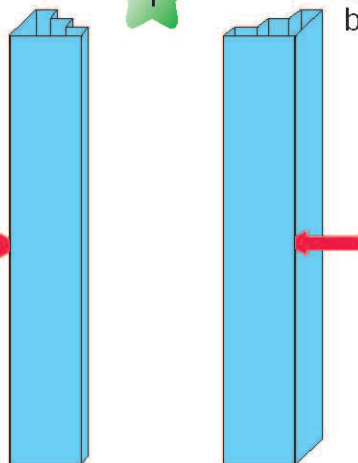
Rectangular Frame Assembly

Get ready the bottom plank, the top plank and 2 side planks.

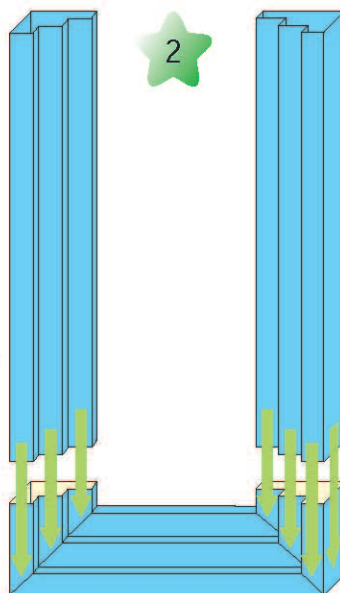


Place the bottom plank by the back side toward you, where there is a slit at the bottom and sides.

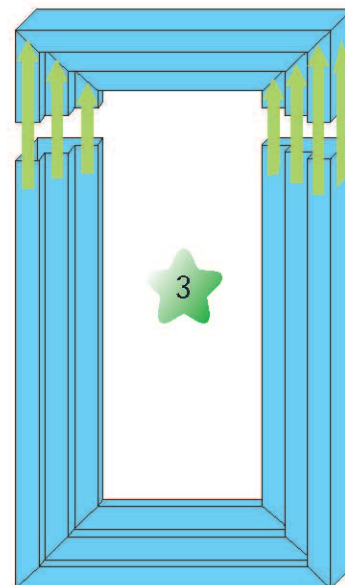
Take the side planks and also locate them as shown, so that there is a slit on the outer side of each of them and it goes along the backside.



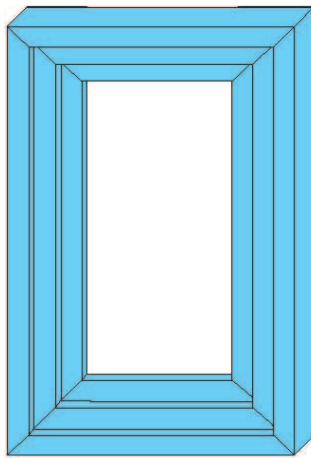
Working from the front side, consistently insert each side plank, sliding it down carefully between the layers of the bottom plank as shown.



This should be the result. Now take the top plank. Step-by-step, insert each side plank, sliding it carefully between the layers of the top plank as shown.

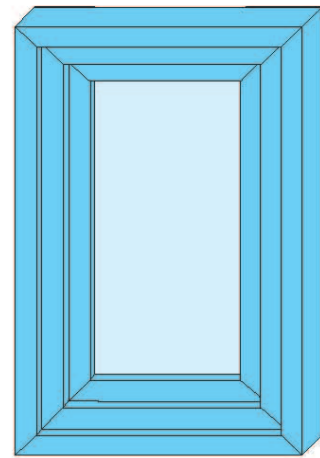


Turn the construction over from side to side.



4

Here is the completed Rectangular Shadowbox Frame with the stairs profile.

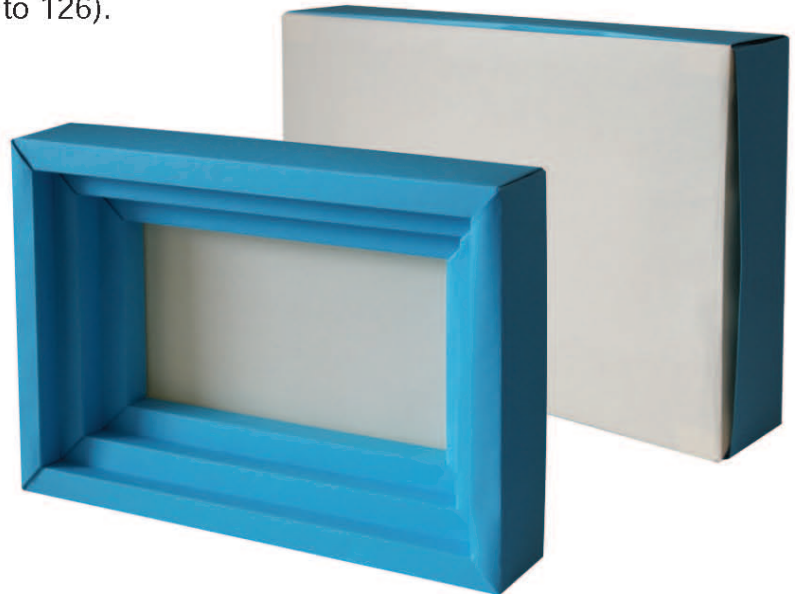


5

To make a customized back piece for this frame, follow suggestions in the article 'Back Piece' (book pages 123 to 126).



Deep Rectangular Frame with an image & Origami Hot Air Balloon



*6-3/4x10" (17x25cm)
Rectangular Frame made
out of Letter format sheets
(11x8-1/2" / 28x21.5cm)*



Deep Rectangular Frame with an image

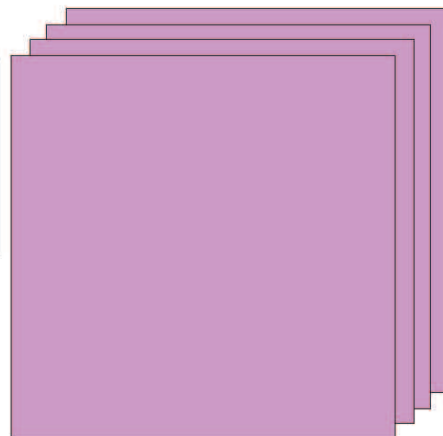
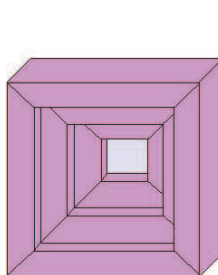


Tubby Square Frame from Squares

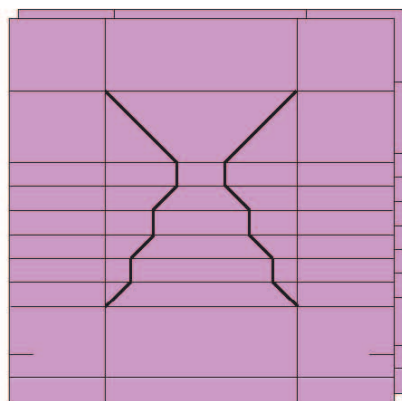
You may use squares to fold a very tubby shadowbox frame with the stairs profile, which has a tiny picture space for displaying a miniature artwork. The side of the resulted frame will be equal to $\frac{1}{2}$ of the side of an original square.

You can use squares made out of sheets of A4 (30x21 cm) or Letter (11x8.5 inches) format or larger.

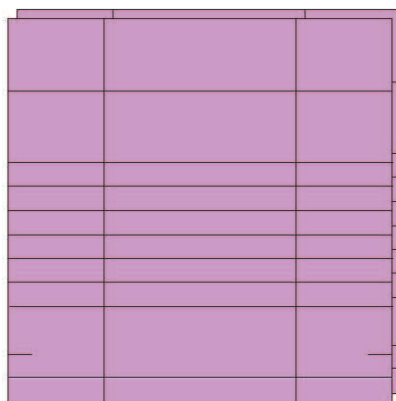
For instance, when using squares made out of sheets of Letter (11x8.5 inches), it will result in a 4- $\frac{1}{4}$ " (11cm) square frame with a 1- $\frac{1}{8}$ -inch square picture space, and frame's depth about 1- $\frac{5}{8}$ inches.



Top / Bottom Planks



Side Planks



Assembly

Fold top, bottom and side planks and then assemble them into a frame in the same way as shown for the Deep Square Frame on pages 2 to 9 of this article (book pages 106 to 113).

To make a customized back piece for this frame, follow suggestions in the article 'Back Piece' (book pages 123 to 126).



Tubby Square Frame with a tiny 10-page book, which is just 1 cm ($\frac{3}{8}$ inch) in size

Here is the completed Tubby Square Frame with the stairs profile.



4- $\frac{1}{4}$ " (11cm) Square Frame made out of 8- $\frac{1}{2}$ " (21.5cm) squares



Tubby Square Frame with tiny 10-page books, each is just 1 cm ($\frac{3}{8}$ inch) in size

Elegant Square Frame from Half of Letter / A4

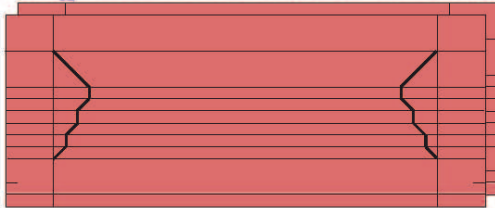


Using rectangles of about 1:3 in proportion, like halves of Letter or A4 formats, will result in an elegant square frame with the stairs profile, which has a rather large picture space.

For instance, when using 11x4.25 inches (28x10.8cm) rectangles, each half-Letter format, it will result in an 8-1/4-inch (21cm) square frame a 6-1/8-inch square picture space, and frame's depth about 1 inch.

Half of
Letter (8-1/2"x11")
or A4 (29.7 x 21 cm)

Top / Bottom Planks

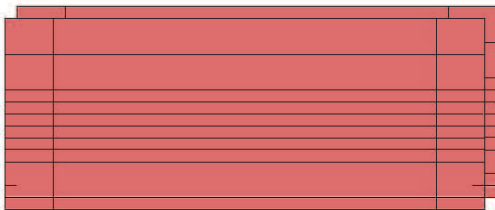


Fold top, bottom and side planks and then assemble them into a frame in the same way as shown for the Deep Square Frame on pages 2 to 9 of this article (book pages 106 to 113).



*Elegant Square Frame
with an image*

Side Planks



To make a customized back piece for this frame, follow suggestions in the article 'Back Piece' (book pages 123 to 126).

Here is the completed
Elegant Square Frame
with the stairs profile.



*8-1/4" (21cm) Square
Frame made out of
11x4.25" (28x10.8cm)
rectangles, each is a
half of Letter format*



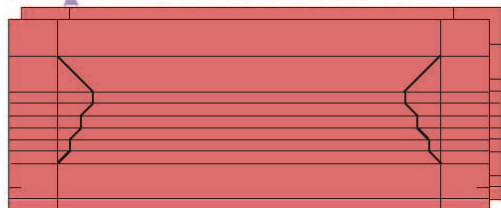
Elegant Rectangular Frame from Half of Letter / A4



Using rectangles of about 1:3 in proportion, like halves of Letter or A4 formats, will result in an elegant rectangular frame with the stairs profile, which has a rather large picture space.

Half of
Letter (8-1/2"x11")
or A4 (29.7 x 21 cm)

Top / Bottom Planks



Side Planks



For instance, when using 11x4.25 inches (28x10.8cm) rectangles, each half-Letter format, it will result in an 8-1/4x10-1/4 inches rectangular frame with a 6-1/8x8-1/8 inches picture space, and frame's depth about 1 inch.

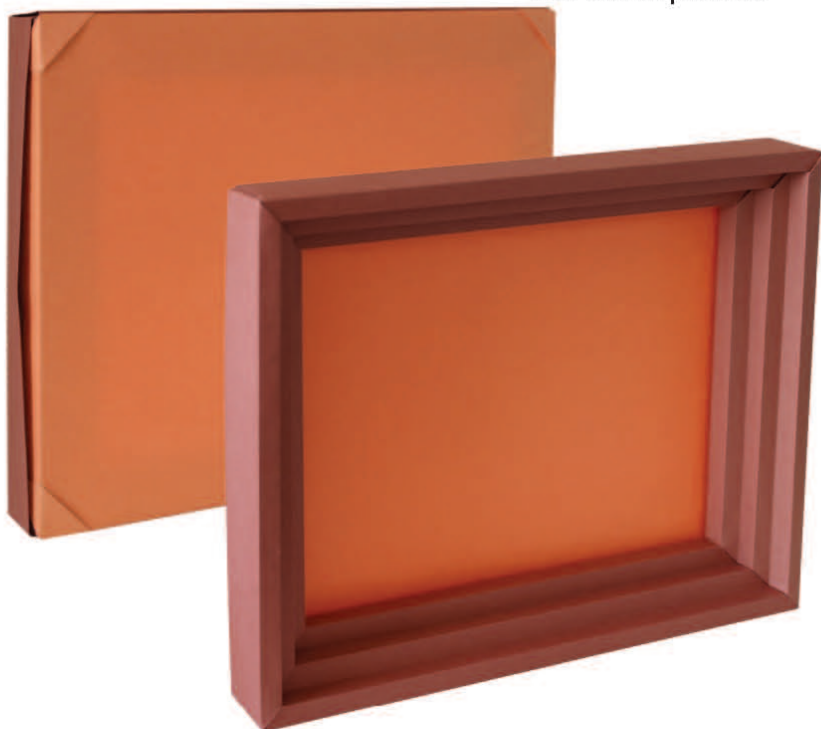
Fold top, bottom and side planks and then assemble them into a frame in the same way as shown for the Deep Rectangular Frame on pages 2 to 7 and 12 to 14 of this article (book pages 106 to 111 and 116 to 118).

To make a customized back piece for this frame, follow suggestions in the article 'Back Piece' (book pages 123 to 126).

Here is the completed Elegant Rectangular Frame with the stairs profile.



*Elegant Rectangular
Frame with an image*



*8-1/4x10-1/4" (21x26cm) Rectangular
Frame made out of 11x4.25"
(28x10.8cm) rectangles, each is a
half of Letter format*



Congratulations! Now you may fold the various shapes & sizes of shadowbox frames with the stairs profile. This attractive frame is wonderful for displaying images and artworks. Enjoy!





Back Piece (for Custom Frame)

by Katrin Shumakov

While we showed some guidelines for back pieces for particular frames in each of the articles, here we'll show you how to make a custom back piece for a custom frame of the designs presented in this book.

There are two types of back pieces we can distinguish here - flat type and envelope type.

Flat Type Back Piece

This is the one that was used in frames with the 1:2 rectangle and square profiles and its main characteristics are:

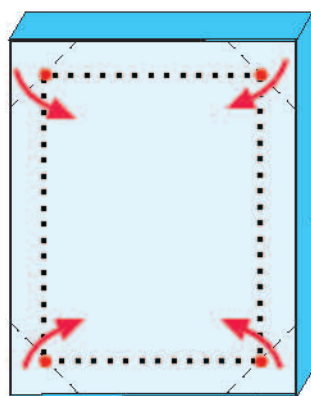
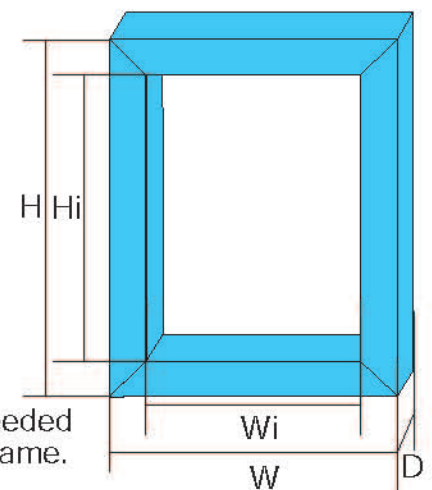
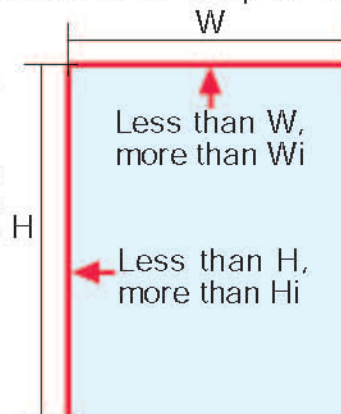
- paper for the back piece is not bigger in size than the frame itself and bigger than a picture space of the frame;
- it inserts into the inner slits of the back side of the frame.

The key point in making a flat type back piece for a custom frame with the 1:2 rectangle and square profiles is to keep to the characteristics listed above.

1:2 Rectangle Profile

Square Profile

Place the prepared background paper on the frame, aligning their centers, and mark the intersection points as shown. You may direct the whole construction against light to see the intersections and make the marks, or find the intersections tactily with your fingertips.

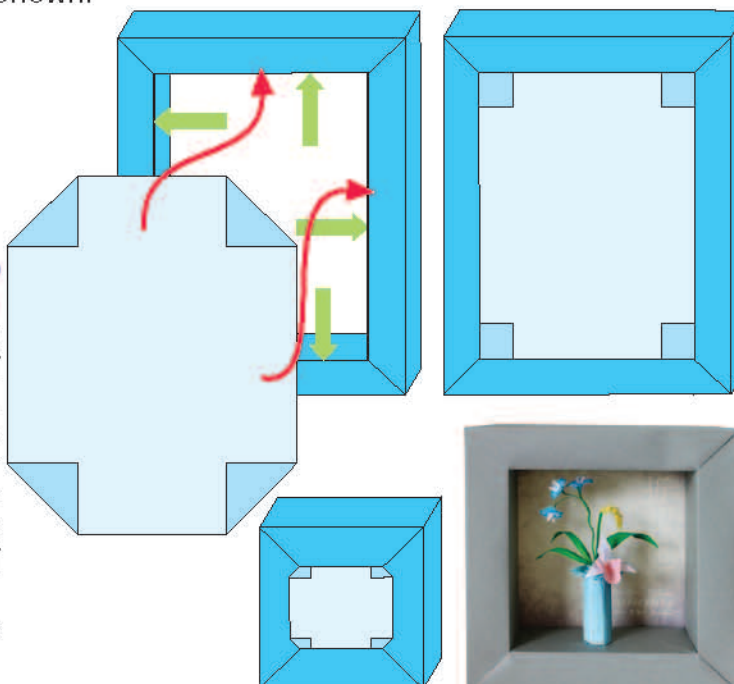


1
Fold the corners over the marked dots as shown.

Prepare the sheet of the needed size suited to your custom frame.

W - width
Wi - picture, width
H - height
Hi - picture, height
D - depth

Insert the background paper into inner slits of the planks of the frame. Depending on assembly process of a particular frame, you may insert the edges of the back piece at least into 2 of the slits (for instance, top and bottom) to keep the back piece in place.



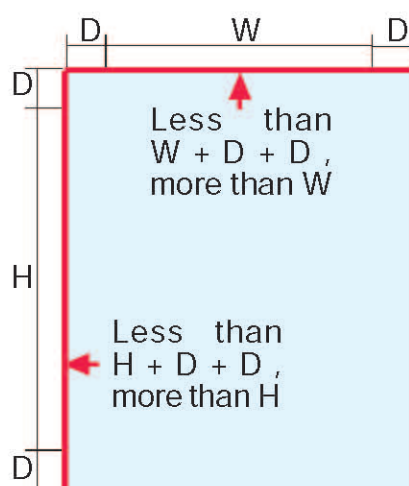
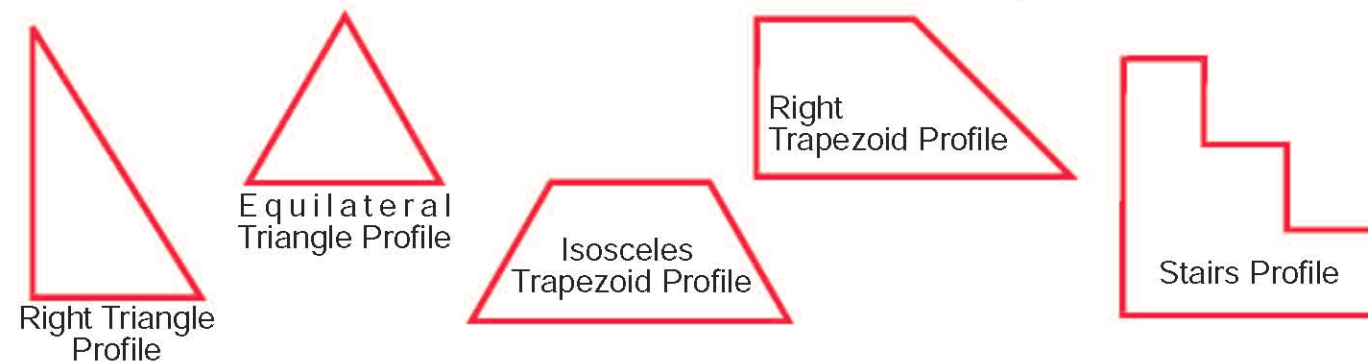
3
The back piece inserted into the frame.



Envelope Type Back Piece

This other type of back pieces which used in frames with all the triangle, trapezoid and stair profiles has characteristics as follow:

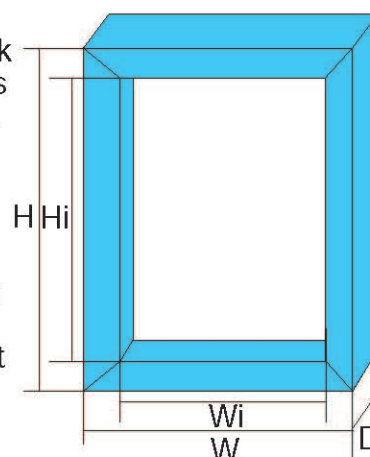
- paper for the back piece is bigger in size than the frame itself, but not bigger than the sum of the 2 depths + 1 width for one side and the 2 depths + 1 height for another side;
- it inserts into the outer slits of the back side of the frame as if it envelopes the frame.



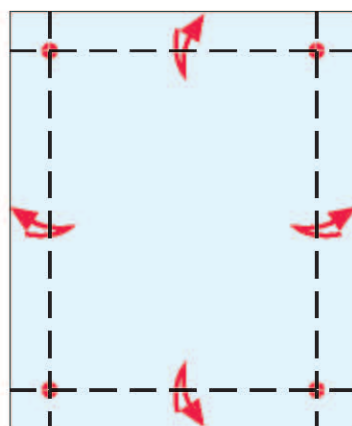
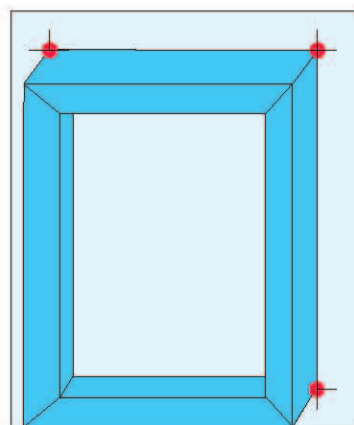
When making an envelope type back piece for a custom frame of these profiles keep to the characteristics listed above.

Prepare the sheet of the needed size suited to your custom frame.

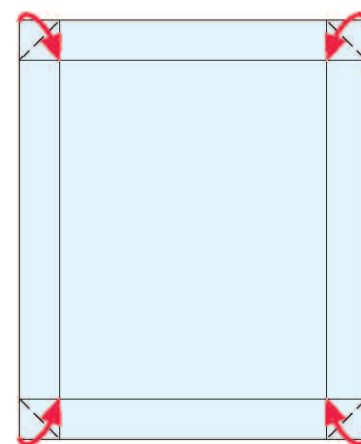
W - width
Wi - picture, width
H - height
Hi - picture, height
D - depth



Position the frame (with the isosceles trapezoid profile in our example) exactly in the middle of the prepared background paper and using a pencil mark the corners of the frame on the square by the dots. Then, remove the frame. You may use a ruler to make exact marks with a pencil.

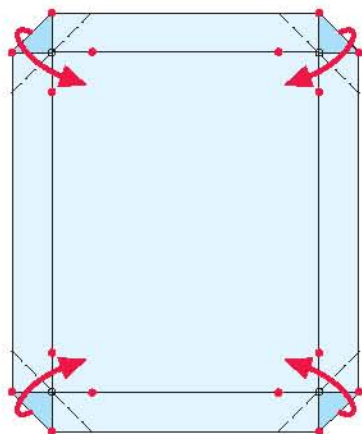


By valley folding make fold-lines on the top, bottom and side edges that go through the dots as shown.

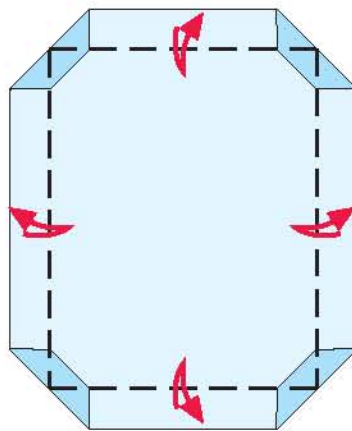


Valley fold the corners along the adjacent fold-lines as shown.

Now working consistently with each corner area of the square, fold the sloping edge over the intersection of the fold-lines, so that the dots coincide.



4

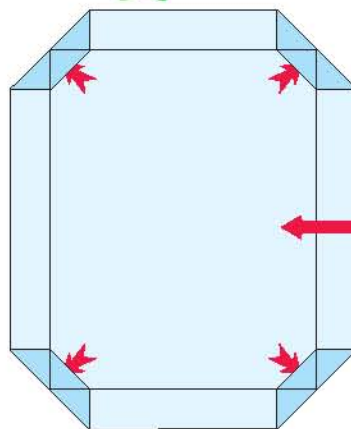


5

Re-fold 'valleys' through new layers of paper as shown.

This should be the result. In this point you may insert the picture into the inner area, inserting the corners into the pockets as shown. Note, that the certain margin along the perimeter on the picture piece will be hidden by the frame itself, so consider it when planning the size of the picture.

6



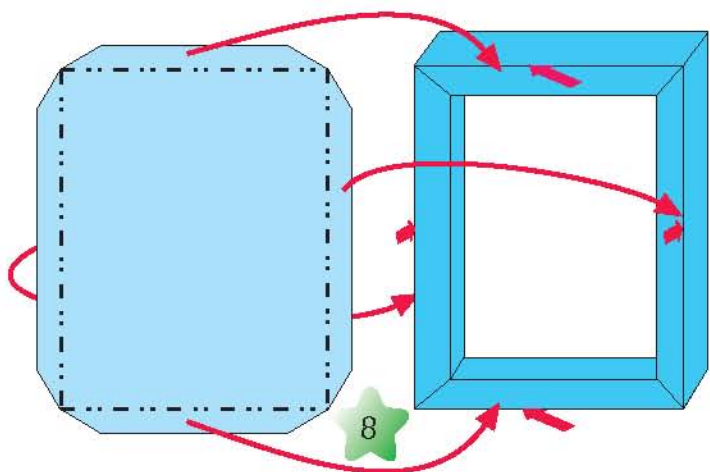
When the piece with the picture is inserted, fold the flaps along the existing fold-lines into the upright position, thereby preparing them for inserting into the frame. Then turn it over, from side to side.

7



Here is the completed Shadowbox Frame (isosceles trapezoid profile) with the back piece and the image.

10

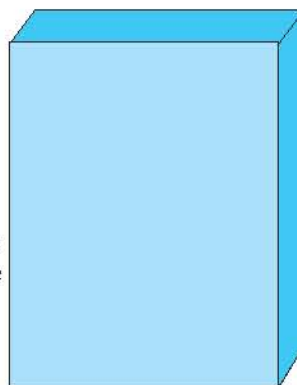


8

Take the frame by its back side toward you, as shown, and consistently insert the flaps of the back piece, for instance first the left-hand flap, then top and bottom flaps and finally the right-hand flap.

This should be the result. Turn the frame over.

9





*Congratulations! Now you can
make back pieces for your
custom origami frames to display
images and artworks. Enjoy!*



ORILAND **What Origami Can Be!**

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About Authors

Katrin and Yuri Shumakov are internationally recognized professional origami artists. First introduced to origami in France in 1989, they developed this art in a heretofore unseen way. Residents of Toronto, Canada and authors of many origami books, they share their art with the world.

They created the fantastic Oriland world, which consists of amazing creations: goblins and wizards, castles of magical wonder, dragons, princesses, trees and flowers, sailing ships and sea creatures, dinosaur skeletons and so much more including elegant floral arrangements they call Oribana. Their origami designs have been exhibited in different countries across the globe.

Psychologists by education, their Ph.D scientific work showed how origami helps the development of children: creates conditions of intensive interaction of the brain's hemispheres and effectively allows development of motor skills of both hands, intellectual and creative abilities.

Yuri and Katrin Shumakov have done Internet projects including this multiple award winning Oriland.com, acknowledged as a high quality creative, educational and fun website for children and adults. They suggest that Origami is entertainment for the Soul, gymnastics for the Mind and training for the Hands.

Enjoy Oriland & see what origami can be!



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Origami Shadowbox Frames

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