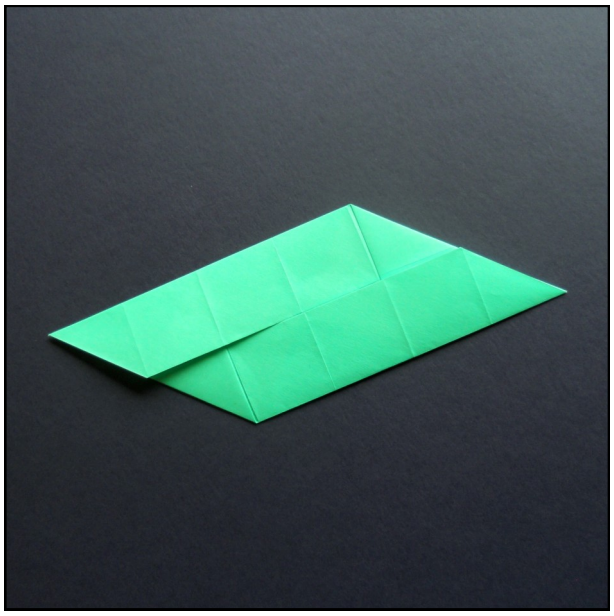
Parallelogram and Triangle Letterbox Modules

Designed by David Mitchell



Letterbox modules are modules which have a central slit into which the tabs of two other modules can be inserted at right angles from opposite directions. There are parallelogram and triangle versions. These diagrams show you how to fold the basic modules. You will need to configure these basic modules using extra folds in order to combine them into modular forms.

The parallelogram version will make any of the cubes, cube combination and silverhedral designs that can be made from other parallelogram modules such as the Sonobe module. The triangle version can also be used to create cubes and silverhedra, but the range of possibilities is much more limited. Mongrel letterbox designs can be made by combining sets of mirror-image parallelogram modules or sets of parallelogram modules with sets of triangle modules in the same design.

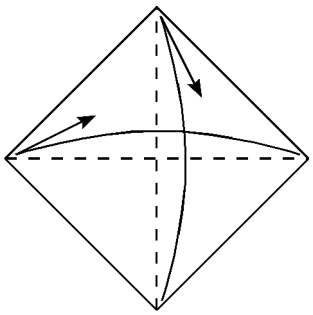
Parallelogram Letterbox modules folded from squares using Method 1 are the same size and shape as Sonobe modules folded from the same size square, which raises the possibility that they could be mixed within Motley designs. Parallelogram Letterbox modules folded from squares using Method 1 can also be used in combination with Maverick modules to create Maverick Motley designs.

I discovered parallelogram Letterbox modules folded using methods 2 and 3 in 1987, before I knew of the existence of the Sonobe module, and worked out Method 1, and the various triangle versions, in 1989.

Folding parallelogram Letterbox modules

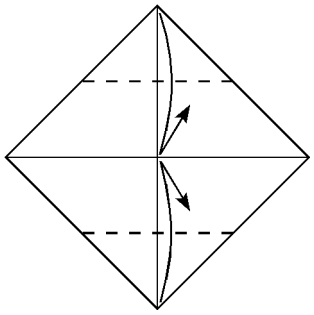
Method 1 - from a square

1



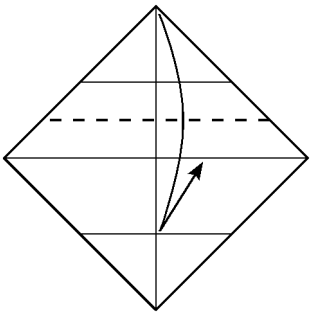
1. Fold in half diagonally in both directions then unfold.

2



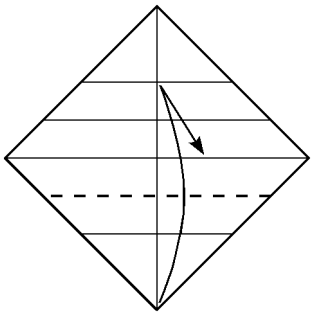
2. Fold both the top and bottom corners into the centre then unfold.

3



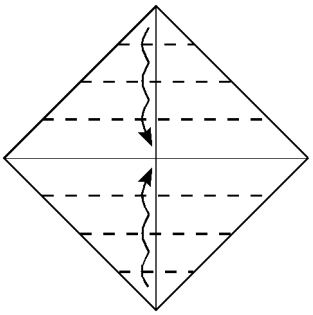
3. Fold the top corner down to the quarter way point, then unfold.

4



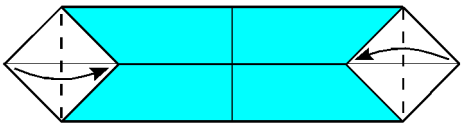
4. Fold the bottom corner up to the quarter way point, then unfold.

5



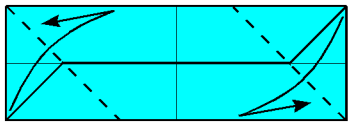
5. Use the existing creases to roll both the top and bottom points inwards.

6



7. Make sure the central edges do not overlap. Fold both the outside corners inwards as shown.

7

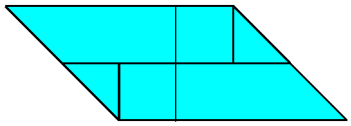


7. Fold the top right and bottom left corners inwards like this, then unfold.

8

8. Fold the top right and bottom left corners inwards again but this time tuck them underneath the opposite flaps.

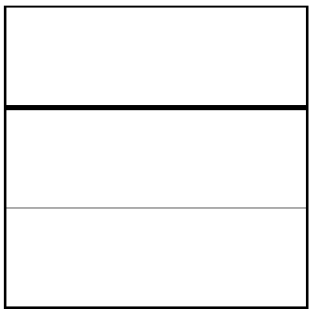
9



9. The basic parallelogram Letterbox module is finished. You will need to add configuring folds in order to make cubes, cube combinations or silverhedra using this module.

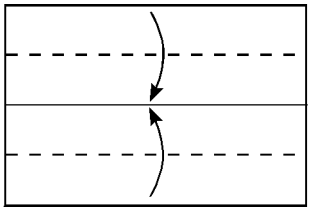
Method 2 - from a 3x2 rectangle

10



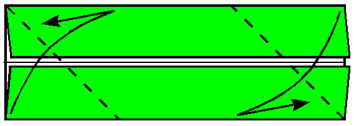
10. The easiest way to create a suitable 3x2 rectangle is to first divide a square into thirds then remove the top third by cutting along the crease marked with a thick black line. A pdf download which shows you how to divide a square into thirds is available from the Utilities section of the Diagrams and Downloads page of this site.

11



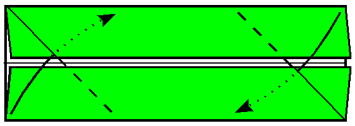
11. Fold the top and bottom edges onto the central horizontal crease.

12



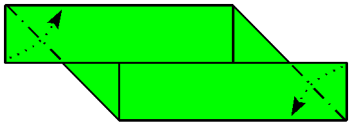
12. Fold the top right and bottom left corners inwards like this, then unfold.

13



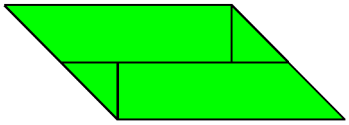
13. Fold the top right and bottom left corners inwards again but this time tuck them underneath the opposite flaps.

14



14. Fold these two small triangular flaps backwards in between the other layers by reversing the direction of the existing creases.

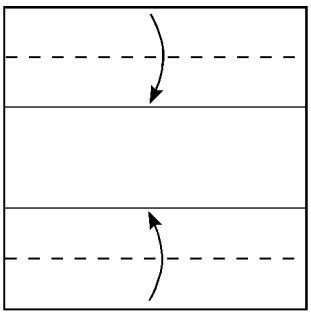
15



15. The basic parallelogram Letterbox module is finished. You will need to add configuring folds in order to make cubes, cube combinations or silverhedra using this module.

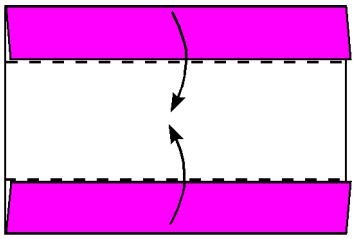
Method 3 - from a square

16



16. First divide a square into thirds then fold the top and bottom edges inwards like this. A pdf download which shows you how to divide a square into thirds is available from the Utilities section of the Diagrams and Downloads page of this site.

17



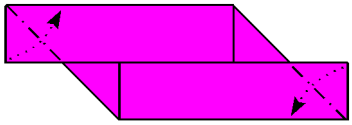
17. Fold the top and bottom edges inwards again using the existing creases.

18 

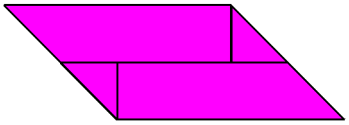
18. Fold the top right and bottom left corners inwards like this, then unfold.

19 

19. Fold the top right and bottom left corners inwards again but this time tuck them underneath the opposite flaps.

20 

20. Fold these two small triangular flaps backwards in between the other layers by reversing the direction of the existing creases.

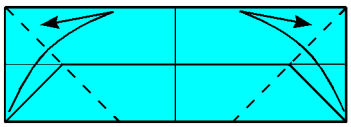
21 

21. The basic parallelogram Letterbox module is finished. You will need to add configuring folds in order to make cubes, cube combinations or silverhedra using this module.

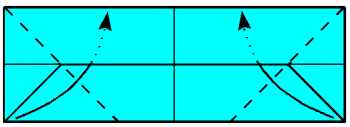
Folding triangle Letterbox modules

Method 1 - from a square

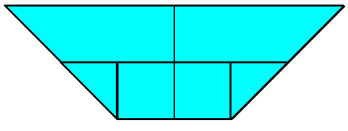
Begin by following steps 1 through 6.

22 

22. Fold the bottom right and bottom left corners inwards like this, then unfold.

23 

23. Fold the bottom right and bottom left corners inwards again but this time tuck them underneath the opposite flap.

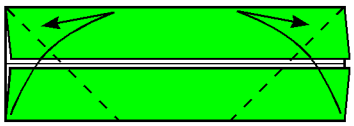
24 

24. The basic triangle Letterbox module is finished. You will need to add configuring folds in order to make cubes, cube combinations or silverhedra using this module.

Method 2 - from a square

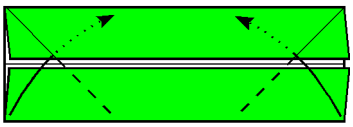
Begin by following steps 10 and 11.

25



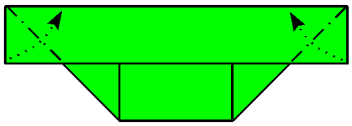
25. Fold the bottom right and bottom left corners inwards like this, then unfold.

26



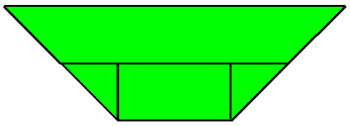
26. Fold the bottom right and bottom left corners inwards again but this time tuck them underneath the opposite flap.

27



27. Fold these two small triangular flaps backwards in between the other layers by reversing the direction of the existing creases.

28



28. The basic triangle Letterbox module is finished. You will need to add configuring folds in order to make cubes, cube combinations or silverhedra using this module.

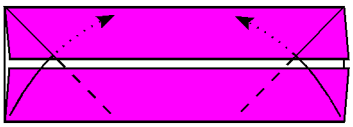
Method 3 - from a square

Begin by following steps 16 and 17.

29

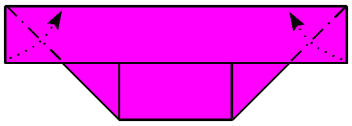
29. Fold the bottom right and bottom left corners inwards like this, then unfold.

30



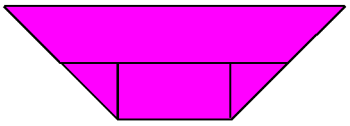
30. Fold the bottom right and bottom left corners inwards again but this time tuck them underneath the opposite flap.

31



31. Fold these two small triangular flaps backwards in between the other layers by reversing the direction of the existing creases.

32



32. The basic triangle Letterbox module is finished. You will need to add configuring folds in order to make cubes, cube combinations or silverhedra using this module.