

No. 715

## Routing stairs of different widths



A

### Description

Manufacturing semi-spiral staircases is not easy. All steps have different widths, depths and also shapes. This application example shows how steps varying in width can be cut quickly, securely and precisely using the routing template MFS.



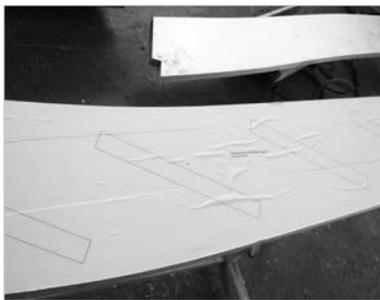
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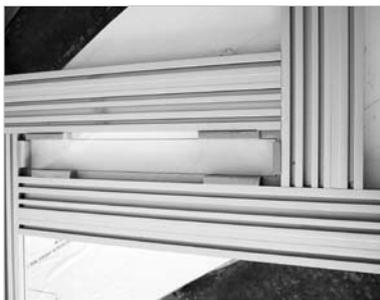
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## B

### Tools/Accessories

You need the following tools and accessories for manufacturing semi-spiral staircases:

Designation	Order No.
Router OF 2200	574260
Routing template MFS 700	492611
Groove cutter Ø 12 mm	491087
Copying ring Ø 30 mm	in the scope of delivery
Fastening clamps	489570
6 spacers made from beech or spruce, 9 mm thick, 25 mm high and approx. 40 mm long	

## C

### Preparation/Set-up

Good preparation for such difficult designs is extremely important. For this reason paper templates have also been used for the semi-spiral stairway, which have been adhered to the stringers. Using the templates the outer contour has been cut and then the steps cut at the scribe mark.

For this work a lot of power is demanded from the router - therefore a OF 2200 was selected.

A copying ring Ø 30 mm and a groove cutter Ø 12 mm have been installed in this.

## D

### Procedure

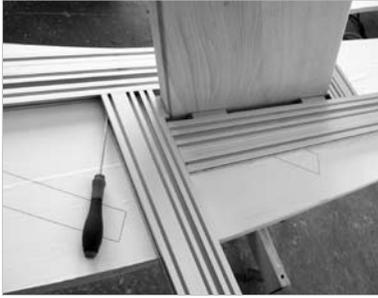
In order to be able to correctly and quickly adjust the cutting frame MFS 700, spacers made from wood (Fig. 5) are used.

The spacers compensate for the distance between the routing template and the actual notch and must be of the same thickness.

If for example a 30 mm copying ring and a Ø 12 mm groove cutter are used, the thickness of the spacer is calculated as follows.

Copying ring Ø 30 mm – Cutter Ø 12 mm = 18 mm: 2 = 9 mm.

The spacers in this case must be 9 mm thick.



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The spacers are now inserted between the step and the cutting frame. Two are distributed at the front and 4 at the step width. Then the frame is pushed together onto the wooden step by opening the side screws and then clamped.

Now the step is copied 1:1 in the cutting frame.

The step is now taken from the cutting frame and this can be clamped on the paper scribe mark of the stairway.

The spacers are also used here for quick alignment of the routing template and must be aligned accordingly and removed in a clamped state.



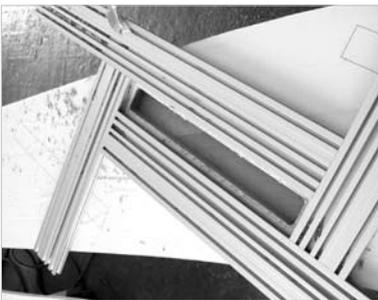
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The routing depth is now set. Here the machine is positioned on the frame and the cutter lowered onto the stair surface.

Now the routing depth at the depth stop of the router can be set.

The step can now be milled out once all settings are effected.

For hardwood it may be necessary to cut the step in 2 work steps/routing depths.



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All steps are made according to this principle and cut into the stringer part.



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Perfect fit - step by step!

**FESTOOL**

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