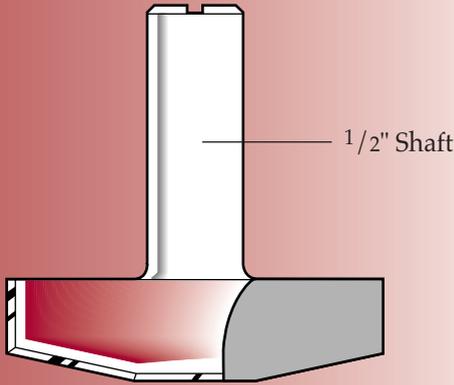


# Titman's

# Raised Panel Effect

INSTRUCTIONS FOR USE



The standard raised panel cutter range is designed for use on, fixed head machines, undermounted on a router table or on CNC machines.

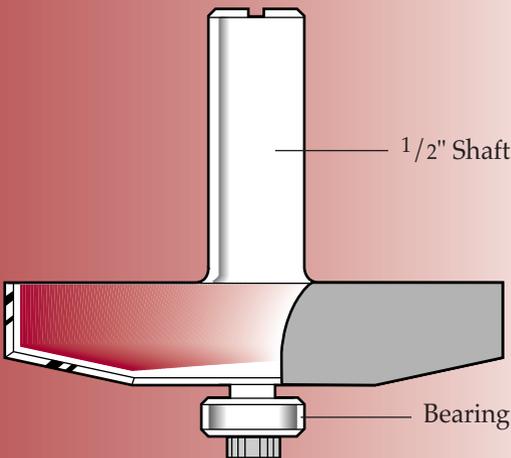
With a maximum RPM of 18,000.

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A 'mirror' of this cutter design can be supplied with a guide bearing to allow for curved head work to be produced.

This cutter has a maximum RPM of 16,000.

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There are eight profiles available.

# How to produce a Raised Panel

## Moisture content

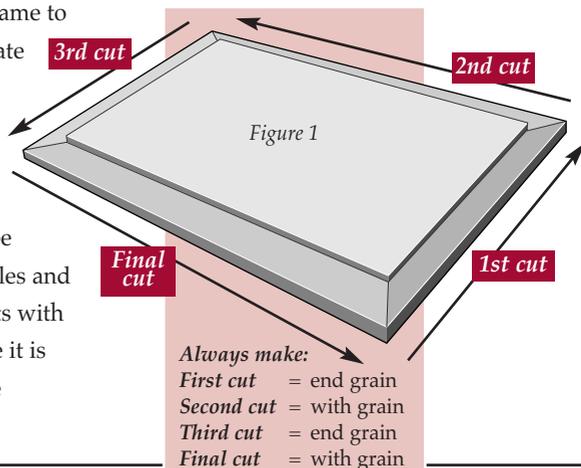
To ensure a perfect finish to your raised panel and the surrounding framework ensure that the moisture content of the timber does not exceed 10%.

## Producing the framework

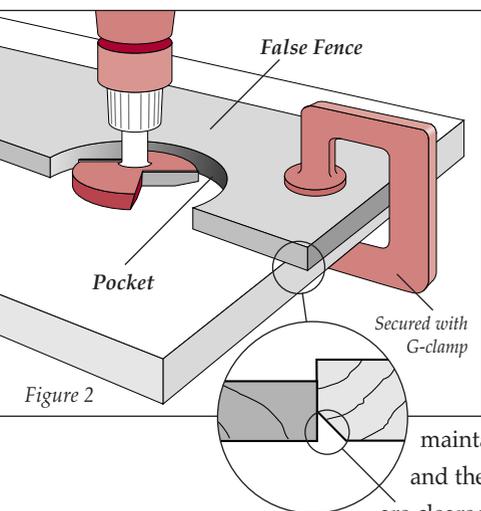
When producing the door or the frame to surround the panel (see our separate FPS/SFPS or RPSS literature) in hard or softwood absolute accuracy is required to ensure a snug push fit joint. In softwood, some very small inaccuracies can be corrected in the clamping of the stiles and rails, however no such luxury exists with hardwood framed doors, therefore it is important to make a test cut before commencing with the work.

## Producing the Raised Panel Effect

When machining a solid wood panel the material must be cut in sequence – this sequence will prevent splitting out of the timber. The cutter will perform much better in an inverted Titman Router Table or similar model.



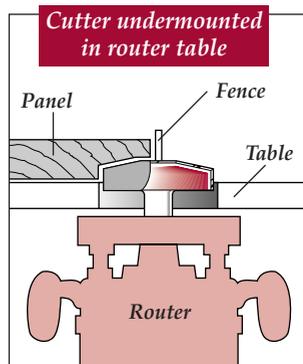
MDF can be machined in any sequence because the grain is contra and random.



If you are working with an overhead router then the best procedure is to make a false fence in plywood or MDF with a pocket for the cutter to locate – see fig 2.

When machining the panel ensure that it is 2–3mm undersize from the inside of the frame to allow movement and to ensure the frame can be successfully clamped together.

A light chamfer on the bottom of the fence allows the panel to maintain contact with the fence and the small chips and sawdust are cleared under the relief chamfer.



## Using raised panel cutters with a bearing - Titman RPCB Range

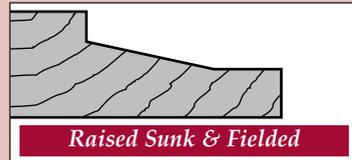
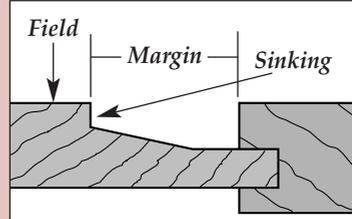
Extreme caution must be exercised when using a bearing cutter of such a large diameter. For use only on a fixed head stationery machine.

### Key points to note:

- 1 Maximum RPM must not exceed 16,000 RPM.
- 2 When producing the panel effect you must feed anti-clockwise around the panel, follow as the arrows on figure 1.
- 3 Try not to dwell on the cut as this will produce a burn or a compression mark.

The advantage of using a raised panel cutter with a bearing is that shaped cathedral headed work can be performed providing the panel is produced first to it's correct outline.

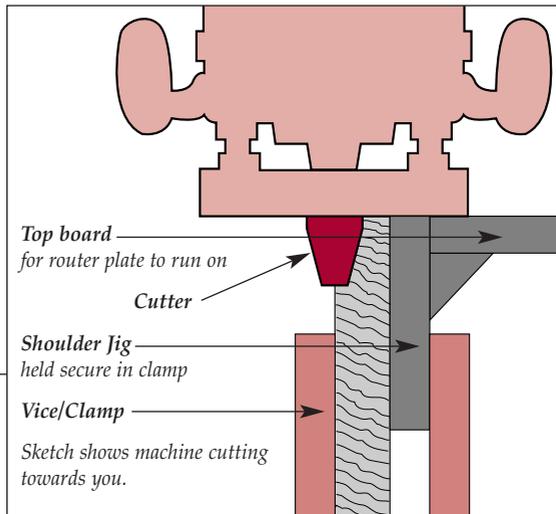
## Panel Terminology



## Vertical panel cutters

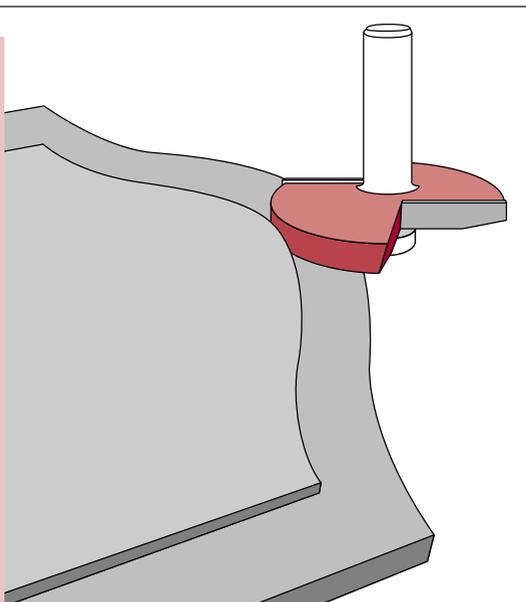
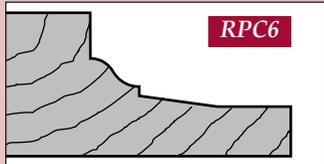
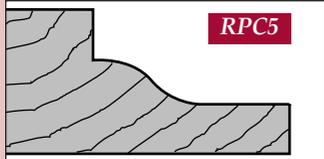
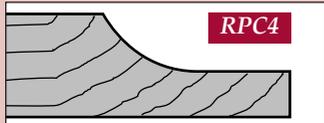
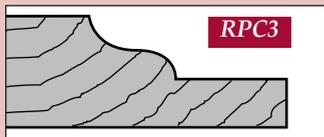
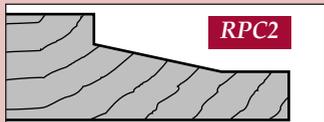
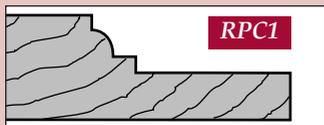
This method is more difficult to set up and machine, but has the advantage of using smaller diameter cutters and can therefore be used on a portable routing machine or under mounted in a router table.

*Profiling & Panelling  
a Cathedral Head Door  
on back page*



Cutters can be used as above sketch, or inverted in a router table. See Titman Router Table, in our General Catalogue.

## *Other panel cutters available*



## *Profiling and panelling a Cathedral Head design*

As a final point, the panel must be machined on it's fielding to the thickness that will push fit into the groove on the stiles and rails. A thickness of 6mm is the required when using a RPS and SFPS to produce the frame.

For further information on this or any other Titman product or service, please contact our Technical Department.



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