FESTOOL

No. 527

# Partial floorboard replacement - parquet with non-glued joint

## A Description

This application example describes how to replace a parquet floorboard in an installed parquet floor. If a parquet floor is damaged, in many cases the only solution is to replace the affected area in the installed floor.
Professional replacement demands a high level of craft skills and professional tools.
To obtain a neat overall appearance of the parquet floor again, the new replaced parquet floorboard must match the surface, colour, grading and moisture of the installed floor.

It is important that this work is only executed with precise, professional tools.
.

527/01

## B Tools/accessories

527/02

Basic equipment:

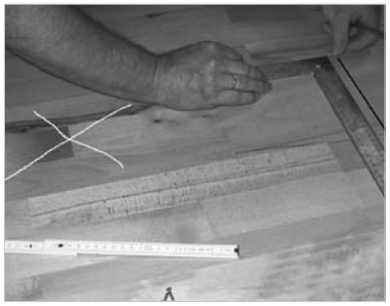
| Denomination | Order no. |
|---|---|
| Router OF 1010 EBQ set GB 240V | 574 334 |
| Groove cutter HW S8 D14/20 | 490 964 |
| Fine adjustment for guide rail adapter FE-FS/OF1000 | 488 754 |
| 2x guide limiter FS-FB | 485 827 |
| circular saw TS 55 EBQ-Plus GB 240V | 561 192 |
| Cordless screwdriver Cordless drills T 12+3 Li Plus GB | 564 298 |
| 2x chipboard screws 4x20 mm | |
| Circular trimming saw *PRECISIO* CS 50 EB GB 240V | 561 194 |

CTM mobile dust extractor
Mortise chisel
Hammer
Stop angle
Yardstick
Tap block
PVAc parquet adhesive

Work sequence:

- drill and countersink guide rail
- cut the first transverse joint
- cut floorboard on longitudinal side
- cross-shaped cuts at the second transverse joint
- remove floorboard from parquet floor
- measure replacement board and fit it
- glue in replacement board

## C Preparation/set-up



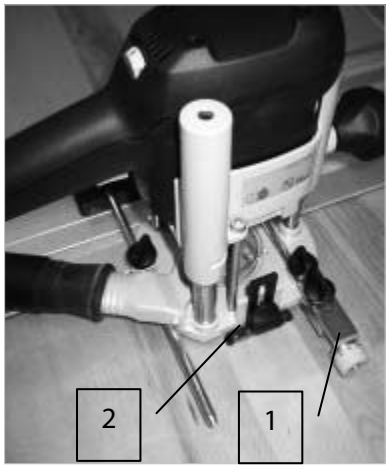
527/03

Starting from the parquet floorboard butt, the parquet element to be removed is marked to a length of 40 to 60 cm with the back square at right angles to the longitudinal side, making allowance for the laminate offset (see Fig. 527/3). If the damaged spot is more than 60 cm from the next parquet floorboard butt, a right-angled scribe mark is made on the left and right of the damaged spot at a distance of 40 to 60 cm.

527/04

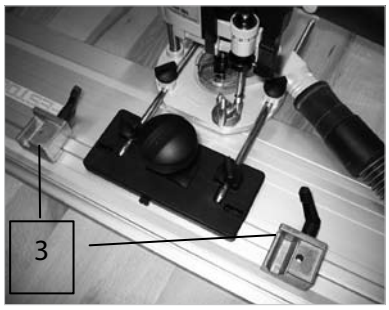
1. Drill and countersink guide rail
The guide rail must be drilled and countersunk for the chipboard screws used (e.g. dia. 4 mm for screws 4x20 mm). The spacing of the bores must be within the width of the parquet floorboard (see Fig. 527/4). Countersink the bores until the screw head is flush with the upper side of the guide rail.

1.1. Aligning guide rail
The guide rail is aligned exactly at right angles to the longitudinal side of the parquet floorboard at a distance of approx. 3–4 cm from the scribe mark. This ensures that there is sufficient space for subsequent routing and that both routing operations can be executed with the same setting.
After positioning, the guide rail is screwed onto the damaged parquet floorboard with two chipboard screws 4x20 mm.




527/05

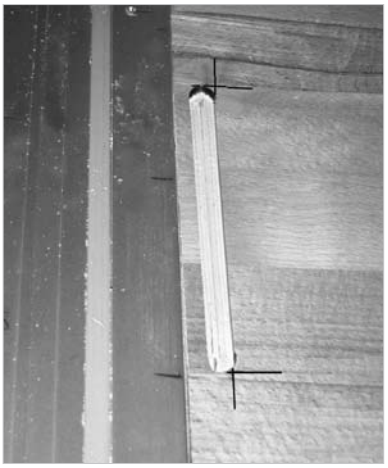
2. Cutting the transverse joint
- Insert the groove cutter up to the marking on the router shank in the router and clamp it.
- Mount the OF 1010 EBQ router with guide rail adapter and fitted fine adjustment (1) on the guide rail and place the support (2) on the router on the parquet floor (see Fig. 527/5). The router should be flat on the guide rail; the guide rail adapter must be movable and free of backlash on the guide rail; adjust the guide rail adapter if necessary.




527/06

- The length to be cut at the transverse joint is determined with the two guide limiters (3) on the guide rail (see Fig. 527/6). To do this, align the cutting circle diameter of the cutter exactly to the scribe mark (see also Fig. 527/9) and position the guide limiter on the router table and clamp it.
- Set the routing depth to 5 mm at the router and cut the groove.

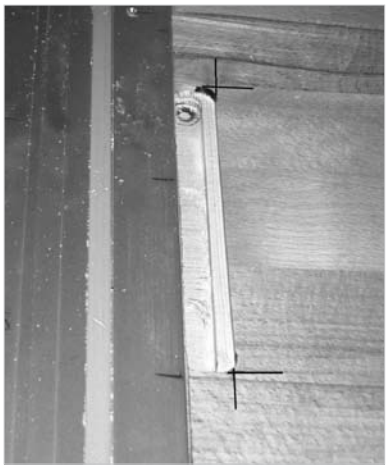
## E Procedure



527/07

The first transverse cut creates the new parquet floorboard abutting edge for the replacement element and reproduces the subsequent tongue upper side on which the inserted partial element rests.

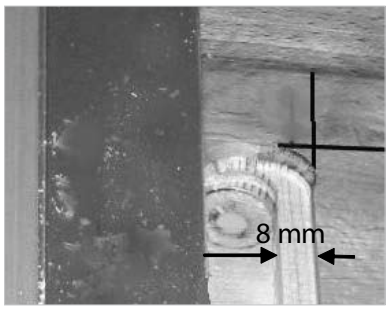
- Connect the suction hose to the router, set the speed level to 6, mount the guide rail adapter on the guide rail and then switch on the machine.
- Place the router against the rear guide limiter on the guide rail and then move slowly to the set routing depth at the turret stop of the router (routing depth 5 mm). The router then cuts a groove between the limiters (see Fig. 527/7).



527/08

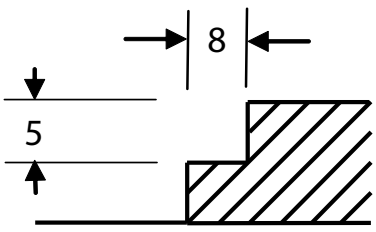
In the routing operation that follows this, a cut offset by 8 mm in relation to the parquet floorboard abutting edge is made, whereby the parquet floorboard is cut through completely.

- The router is then shifted with the fine adjustment 7-8 mm from the routed groove towards the floorboard to be replaced.
- Set the routing depth to parquet floorboard thickness.
- Position the router at the rear guide limiter and cut through the parquet floorboard (see Fig. 527/8 and Fig. 527/9).



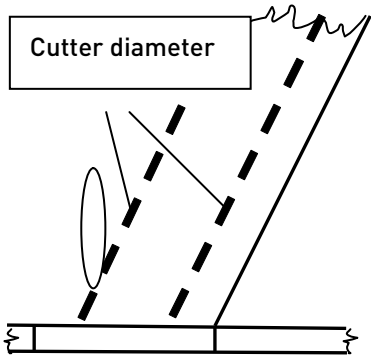

527/09

The two cuts along the entire width of the parquet floorboard have reproduced a new tongue upper side and the front-face transition from the replacement element to the existing parquet floor.




527/10

527/11

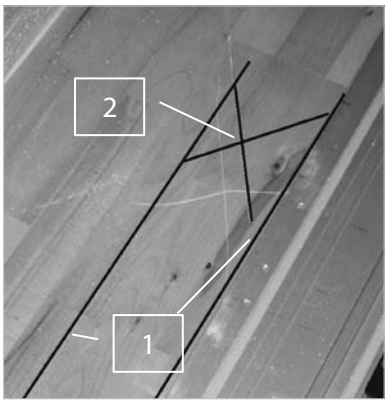



527/12

3. Rip cuts on the replacement floorboard

Using the TS 55 EBQ plunge-cut saw and the guide rail, two rip cuts (see Fig. 527/12) followed by two cross cuts (2, see item 4) are made in the parquet floorboard to be replaced (see Fig. 527/13).

- Set the cutting depth at the plunge-cut saw TS 55 EBQ to parquet thickness.
- Screw the guide rail lengthwise with the chipboard screws onto the parquet floorboard to be replaced.
- Mount plunge-cut saw TS 55 EBQ on the guide rail and, if necessary, use the two setting jaws to adjust to the guide rail without play. Set speed level 6 and connect extraction hose.
- With this setting, you now make a cut along the entire length of the parquet floorboard to be replaced.
- Following this, repeat the procedure for the second cut.



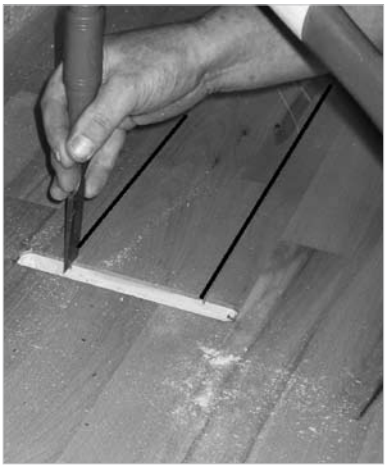

527/13

4. Making cross cuts at the floorboard butt

At the other parquet floorboard butt, two cross-shaped cuts (2) are made in the floorboard to be replaced (see Fig. 527/13). The cuts should be made from the middle of the parquet floorboard to be replaced up to the rip cuts (1).

- Place the guide rail on the parquet floor, align it and screw onto the replacement board with the chipboard screws. Make a plunge cut up to the rip cut.

- Repeat the procedure for the second cut.



527/14

5. Cutting the attachment points and levering out the damage floorboard

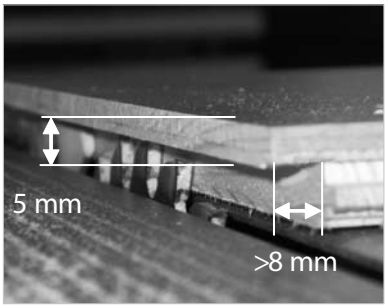
Use a sharp mortise chisel to cut through the remaining attachment points at the transverse joint (see Fig. 527/14).

527/15

The remains of the parquet floorboard still in the joints are also carefully levered out with the mortise chisel and / or screwdriver (see Fig. 527/15).

Following this, the remainder of the parquet floorboard on the face side is removed from the transverse edge. To do this, the remaining piece is also released carefully with a mortise chisel from the transverse joint.

The visible floor is now cleaned with a vacuum cleaner to remove chips and scraps.




527/16

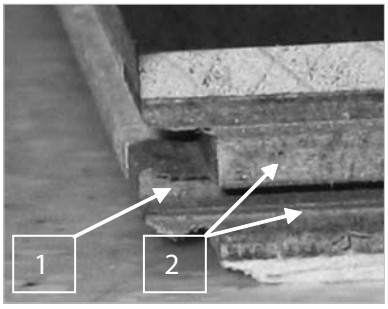
6. Measuring and inserting replaceable floorboard

The selected replaceable floorboard is now placed in position and the length marked exactly with a pencil.
The transverse side of the replacement floorboard is worked on first, followed by the length.

Transverse side:

- The cutting depth is set so that the protrusion at the replacement board corresponds to the depth of the cut in the floor (in our example, 5 mm).
- Set speed to level 6 at the Precisio CS 50 EB and connect the extractor hose.
- Place the replacement floorboard on the bottom side and longitudinal side against the preset profile setting rail, switch on the machine and, with several cuts with the guide fixture, reproduce the resultant overlap on the transverse joint edge (see Fig. 527/16).

Tip: If the rebate is slightly larger than 8 mm, this avoids tension in the parquet group and the replacement floorboard is easier to insert.




527/17

Longitudinal side:

- The length of the replaceable floorboard is now cut exactly on the Precisio CS 50 EB.
- Saw off the locking unit (1) and the groove cheeks (2) of the replacement element on the longitudinal and transverse side with the Precisio CS 50 EB (see Fig. 527/17).

527/18

7. Gluing in the replacement element

For permanent fixing of the replacement floorboard, PVAc adhesive is applied to the tongue on the longitudinal side and on the face.

The new piece of parquet is now inserted carefully and locked with the opposing joint by light knocks with a hammer against a tap block (see Fig. 527/18).

The glue needs at least 2 hours to reach its final strength. To ensure a true fit during the hardening process, weights are placed on the glued-in parquet element.

Any fitting inaccuracies or gaps are levelled with 2-component putty material and surplus putty is removed with acetone.

Finally the repair area is treated with the same care products and measures as the surrounding area.