

No. 505

## Cutting sandwich elements with portable circular saws



A

### Description

This application example describes how to cut to size a 60-mm thick composite panel with a portable circular saw TS 75.

Sandwich elements are often processed for external panelling of halls, e.g. warehouses, logistics centres, production buildings, department stores, etc. Sandwich material consists of two steel covering shells with shear-resistant connection to one another over a heat-insulating core made of polyurethane (PU) high-resistance foam. The covering shells are made of 0.6-mm thick ST 37 steel, hot-dip galvanised and coil-coated (spec. paintwork production type). They are supplied lined, flat or with trapezoidal sheeting.



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## B

### Tools/accessories



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For a cable duct cut, you will require the following machines and auxiliary equipment:

Denomination	Order no.
Plunge-cut saw TS 75 EBQ Plus	561190
guide rail FS 1400	491498
4x one-hand lever clamp FS-HZ 160	491594
Mobile dust extractor CTM 26 E GB 240V	584003
Multifunction table MFT 3	495315
Spark trap D 50 FL	484733
Flat top saw blade 210x2.2x30 F36	493351

The spark trap is installed at the mobile dust extractor between the hose and the hose connection. It prevents sparks produced during sawing from entering the dust extractor, Fig. 505/02.



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#### Saw blade changing

- Disconnect the machine from the mains
- Push the FastFix lever down to the detent
- Push switch lock up and push sawing unit down until it locks into place



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- Open screw with Allen screw
- Remove saw blade
- Clean flange
- Insert steel/sandwich saw blade [493351]. The direction of rotation of saw blade and machines must match
- Mount outer flange and tighten screw



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- Push FastFix lever back

## C

### Preparation/set-up

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#### Guide play

- First adjust the green eccentric jaws in the base plate of the portable circular saw to the guide rail, ensuring there is no backlash.

It should be possible to move the machine on the guide rail without any significant resistance.

#### Cutting into the splinterguard at the guide rail

- Prior to the work step, a cut is made into the splinterguard of the guide rail.
- To do this, the cutting depth display must be set to 15 mm.
- The cutting depth indicator on the scale is pressed in and, at the same time, set to the desired depth.

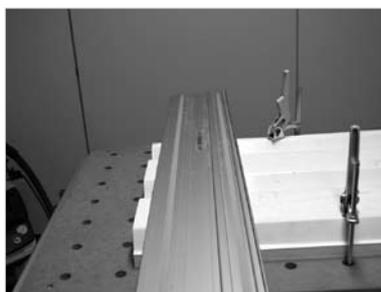
Cut into the splinterguard along the entire length.

This sets the cutting edge of the splinterguard exactly to the circular saw including saw blade and can therefore be used as a guide edge and scribe mark.



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1. Secure the composite panels on a table, wooden stands, or similar, with fastening clamps. (Alternative: place on floor with approx. 15-cm thick wooden supports, e.g. square timber.)
2. Mark the course of the cut on the composite panels if necessary.



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3. Align the guide rail at the scribe mark and secure with fastening or lever clamps on the workpiece.



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4. Connect extractor hose to plunge-cut saw.



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- 5. Mount portable circular saw on guide rail, set speed level 3-4 and cut composite panel to size with moderate feed force.

Important:

Processing of composite material requires the following:

- 1. The correct saw blade from Festool.
- 2. Wearing of protective goggles, working gloves and, possibly, body protection (to prevent injury).
- 3. Slow work – never plunge abruptly into the workpiece.
- 4. Set speed level 3–4 and select a low feed speed.
- 5. Work with dust extraction.

**FESTOOL**

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