

No. 506

Sawing composite panels with jigsaws



A

Description

This application example describes the cutting of a 60-mm thick composite panel with a pendulum jigsaw.

Composite panels are often used on the external panelling of steel halls, e.g. warehouses, logistics centres, production buildings, department stores, etc.

Composite material consists of two steel covering shells with a shear-resistant connection to one another via a heat-insulating core made of polyurethane (PU) high-resistance foam.



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The covering shells are made of 0.6 mm thick ST 37 steel and are hot-dip galvanised and coil-coated (spec. paintwork production type). They are supplied lined, flat or with trapezoidal sheeting. The polyurethane (PU) high-resistance foam guarantees excellent heat insulation.

(composite panels 60 mm thick = k value 0.32 or composite panels 40 mm thick = k value 0.38.)

At the same time, composite panels are characterised by sound insulation of $R_w = 25$ dBA.

For the preparation for assembly in the workshop or on-site at the construction site adjustment work is required. Corners must be notched, parts adjusted and radii cut.

Previous procedure

Complex, time-consuming and energy-sapping cutting using a hand hacksaw.

Cutting using angle grinders with the risks:

- Burning out the covering shell (unclean cut).
- Melting of the polyurethane (PU) high-resistance foam.
- Inaccurate split cut.

Solution

Using a pendulum jigsaw and a special jigsaw blade composite panels can be processed quickly, cleanly and efficiently.

B

Tools/Accessories



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Basic equipment:

Designation	Order No.
PS 300 EBQ, PSB 300 EBQ or PS 200 E	*
CT 22 E	*
Accessories:	*
Saw blade HS 105/1.2 bi	*
Saw blade HS 155/1.2 bi	*
Saw blade HS 105/2.0 bi	*

*Please obtain the order no. from the Festool main catalogue or from the Festool website.



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Alternative:

All Festool mobile dust extractors are alternatives to the mobile dust extractor CT 22 E.

C

Preparation/Set-up



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Adjustment of guide on the jigsaw blade

- 1. Remove chip guard from pendulum jigsaw.
- 2. Set pendulum stroke switch to setting 3.
- 3. Open clamping screw using an Allen key.
- 4. Remove FastFix and position saw blade in the clamping ring as far as the stop.
- 5. Using the Allen key engage screw at the carbide guide until the jaws are almost resting on the saw blade.
- 6. Click in the chip guard again.



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Settings for PS 200:

For 3: Remove clamping screw of the saw blade guide using screwdriver.

For 4: Open clamping screw on the saw blade holder using an Allen key (SW4).

Setting on the pendulum jigsaw

- Set the speed to level 4.
- Set pendulum level to 1 and select appropriate saw blade.

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 to 4 and select a low advance speed.
5. Work with dust extraction.

E

Procedure



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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.)

Mark composite panels as and when required.

Connect extractor hose at jigsaw.

Position jigsaw on composite panel.

Switch on tool and saw the notch or radius at moderate advance speed.

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Our example for use is a recommendation tried and tested in practice. However the actual conditions pertaining in each situation are completely outside of our control. We therefore do not provide any form of guarantee. Any legal claims arising out of this are not to be made against Festool. Please observe without fail the safety and operating instructions included with the product.

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