

## MACHINING TRESPA

### General

Trespa is a flat panel, based on thermosetting resins, homogeneously reinforced with wood based fibres and manufactured under high pressure and at high temperatures. The homogeneous composition of the material makes it possible to machine both the sides and the surface.

Machining Trespa panels is comparable to machining high quality hardwood. Trespa panels may be machined using carpentry tools. The hardness of Trespa places higher demands on the tools than machining materials composed of softwood.

The use of hard metal tools is advised. Diamond-tipped tools are recommended for large series and when using advanced machines (multi-purpose machines). This provides for a very good finish and a long tool life.

When machining Trespa panels following guidelines are to be observed:

- use machines with stationary tools and moving worktops or keep the panel in position and move the tool along;
- have the visible surface facing upwards when sawing, drilling and routing;
- lift the panels and avoid sliding them as much as possible, also during transport and assembly;
- use insert templates covered with rubber mats to prevent the panels from sliding if the machine does not have a moving worktop and/or if you are machining double-sided panels;
- when the visible side must be slid over the machine's worktop whilst machining, it is recommended to place a protective panel, for example of hardwood, on the worktop.

### Protective foil

Additional guidelines for Trespa Meteor Gloss or other Trespa panels provided with a protective foil.

- Trespa Meteor Gloss panels should preferably be machined on computer operated equipment.
- When stored, leave the panels lying flat on top of each other, to prevent them from being subjected to an uneven load.
- When re-packing, do not place any moisture-sensitive layers (paper) between the panels.
- Remove the foil within 24 hours of the panels being removed from the pallet.
- If the foil burns or melts during machining, remove only the foil in the edge areas.
- Do not write down any codes directly on the protective foil but use adhesive stickers for marking/coding.

## Sawing

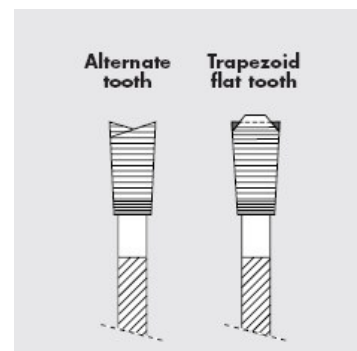
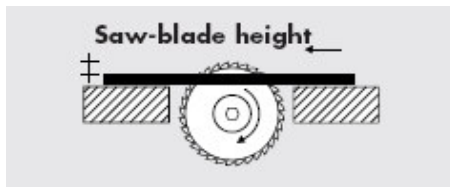
Circular saw:

Diameter	Teeth	Number of revolutions	Blade thickness	Height setting
150 mm	36	4.000/min	2,5 mm	15 mm
200 mm	46	4.000/min	3,0 mm	20 mm

Stationary circular saw:

Diameter	Teeth	Number of revolutions	Blade thickness	Height setting
300 mm	72	6.000/min	3,4 mm	30 mm
350 mm	84	5.000/min	4,0 mm	35 mm
400 mm	96	4.000/min	4,8 mm	40 mm

- Feed: 7 - 22 m/min.
- Tooth: alternate tooth or trapezoid flat tooth.
- Jig saw: carbide-tipped, interior corners of cut-outs should be drilled first with 6 mm hole diameter.
- Entering tooth: at the decorative side of the panel.
- Cut edges: the best results are obtained with stationary machines. Any sharp edges can be removed with sandpaper or router.
- Rake angle: a rake angle of 45° gives the best performance.

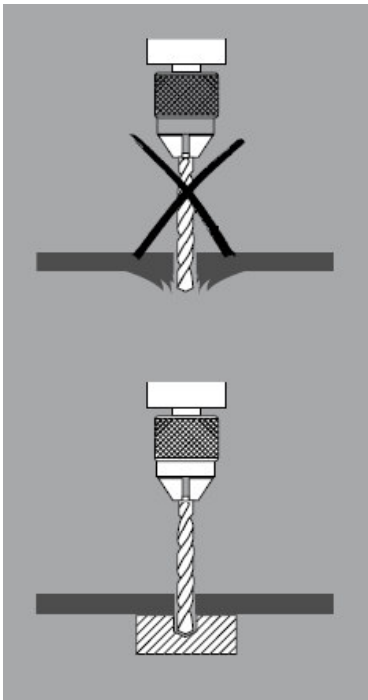


## Drilling

Carbide-tipped HSS-drill, top angle 60-80°. Panels should be drilled with support sheets.

Diameter	Number of revolutions	Feed
5 mm	3.000/min	60-120 mm/min
8 mm	2.000/min	40-80 mm/min
10 mm	1.500/min	30-60 mm/min

Large holes, e.g. for suspension and locking equipment, are to be drilled with combination drills without a centering point.





### Routing

Manually operated routing cutter or spindle moulder:

Diameter	Number of revolutions	Speed	Feed
20-25 mm	18.000-24.000/min	20-30 m/s	5 m/min
125 mm	6.000-9.000/min	40-60 m/s	5-15 m/min

Routing shapes:

- straight and slanted bits for cutting edges and bevelling;
- hollow or round ground bits for rounded edges;
- diamond groove-circular saw blades for grooves.

Material:

- cutters made of hard metal or diamond.

### Safety

Please note that serious dangers are inherent with the use of (carpentry) machinery. In all cases, follow the guidelines of the machinery producers and the recommendations of the Labour Inspectorate strictly.

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