

Machining Guide

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General

Machining VIVIX+[®] panels should only be carried out by a machining or construction professional with correct equipment. The homogeneous composition of the material makes it possible to machine both sides and the surface. Machining VIVIX+ panels is comparable to machining high quality hardwood. VIVIX+ panels may be machined using carpentry tools. The hardness of VIVIX+ panels makes greater demands on tools than when machining materials composed of softwood. Diamond-tipped tools are recommended, which will ensure a very good finish and longer lasting tool life.

Health and safety

Please note that serious dangers are inherent with the use of (carpentry) machinery. In all cases, adhere strictly to the guidelines of the machinery manufacturers and the recommendations of the safety and labour organisations.

Transport and handling

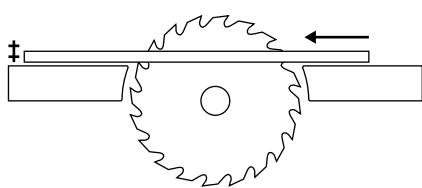
In general, lift the VIVIX+ panels and avoid sliding them as much as possible, also during transport and assembly.

Sawing

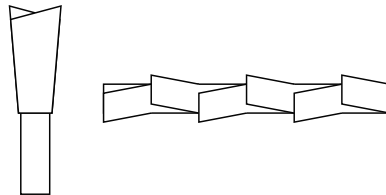
The following general guidelines apply to the sawing of VIVIX+ panels.

- **Feed:** 7 - 22 m/min
- **Tooth:** Alternate tooth or trapezoid flat tooth.
- **Positioning:** Entering tooth always at the decorative side of the VIVIX+ panel.
- **Cutting edges:** 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.
- Use insert templates covered with rubber mats to prevent the VIVIX+ panels from sliding if the machine does not have a moving table top and/or if you are machining double-sided panels.

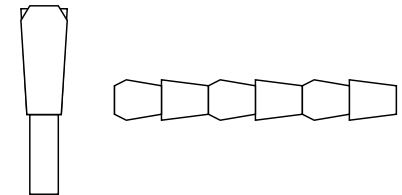
Saw-blade height setting



Alternate tooth



Trapezoid flat tooth



Stationary circular saw

Have the decorative side facing upwards when sawing, drilling and routing. When a decorative side must be slid over the machine's worktop while machining, it is recommended to place a protective panel, for example of hardwood, on the worktop.

Blade diameter (mm)	Teeth	Number of revolutions	Saw blade thickness (mm)	Saw blade height setting (mm)
300	72	≈ 6.000/min	3.4	30
350	84	≈ 5.000/min	4.0	35
400	96	≈ 4.000/min	4.8	40

Portable circular saw

When using a portable circular saw, the non-decorative side should be upwards.

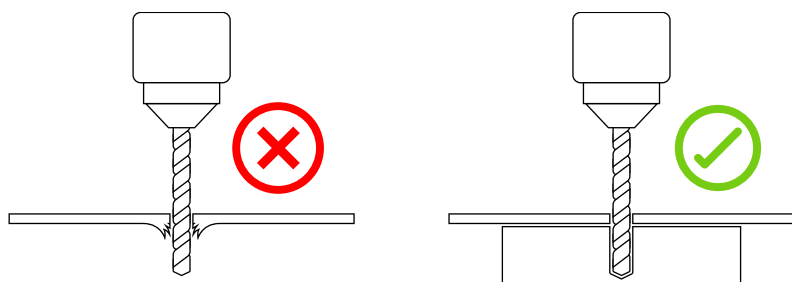
Blade diameter (mm)	Teeth	Number of revolutions	Saw blade thickness (mm)	Saw blade height setting (mm)
150	36	≈ 4.000/min	2.5	15
200	46	≈ 4.000/min	3.0	20

Jig saw

- Jig saw: carbide-tipped, interior corners of cut-outs should be drilled first with 8 - 10 mm (≈ 5/16 - 3/8 in) hole diameter.
- Consider the use of a specific jig saw blade for decorative surfaces.

Drilling

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



Bit diameter (mm)	Number of Revolutions	Feed speed (m/min)
5	≈ 3.000/min	60 - 120
8	≈ 2.000/min	40 - 80
10	≈ 1.500/min	30 - 60

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

Routing

- 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.

Manually operated routing cutter or spindle moulder:

Bit diameter (mm)	Number of revolutions	Speed (m/s)	Feed (m/min)
20 - 25	≈ 18.000 - 24.000/min	20 - 30	5
125	≈ 6.000 - 9.000/min	40 - 60	5 - 15



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