



Cutting/Machining/Customization/Cleaning/Warranty

ezoBord can be processed with most tools used for machining wood. Tool speeds should be set up such that the ezoBord sheet does not melt from frictional heat. In general, the highest speed at which overheating of the tool or sheet does not occur will give best results.

It is important to keep cutting tools sharp at all times. Hard, wear-resistant tools with greater cutting clearances than those used for cutting metal are suggested. High-speed or carbide-tipped tools are efficient for long runs and provide accuracy and uniformity of finish. Bring the blade to full speed before starting the cut. Secure the sheet during cutting operations to minimize vibration.

As ezoBord is a 100% polyester sheet (42% recycled), it has characteristics similar to plastic and overheating may cause it to melt or fuse slightly on the heated contact points. A method of reducing heat is by making several passes while cutting or trimming the sheet rather than trimming "deep" through the sheet.

Cutting and Drilling Guidelines

Do:

- Practice on pieces of scrap before cutting parts.
- Use sharp, clean blades and bits.
- Use slow, consistent feed rate.
- Hold sheet firmly while cutting to minimize vibration; use just enough clamp pressure to prevent vibration.
- Feed against the rotation of the blade or tool.
- Wear proper safety equipment.

Don't:

- Cut or drill with a dull blade, cutter, or bit.
- Apply excessive clamping pressure.
- Use a blade with side-set teeth.
- Remove safety guards from equipment.

Sawing

Any of the following saw types, commonly used for wood or metal, should be satisfactory for cutting ezoBord sheet: circular saws, band saws, saber saws, jigsaws, hacksaws, or handsaws.

However, some saw designs are better suited than others for sawing ezoBord because they produce smoother or faster cuts. Circular saws and band saws usually produce the best surfaces, and they can be used in most sawing operations.

Blade design plays an important part in successful sawing of an ezoBord sheet.

A skiptooth band saw blade is preferred because the wide gullet provides ample space for the plastic chips to be carried out of the kerf (the cut made by the saw). For best results, the teeth should have zero rake and some set. For a curved cut, the blade should be narrower and have more set than for a straight cut. The blade must be kept sharp to prevent melting or chipping of the sheet, and the blade guide should be placed very near the cut to minimize vibration.

A circular saw is preferred to a band saw for straight cuts even though it tends to generate more heat. A perforated saw blade will run cooler than a solid blade. It is essential that the spindle bearing be tight so that the saw will run true.

ezoBord can also be cut in other ways including traditional workshop tools such as a jig saw, router, die cutter or even using manual techniques such as guillotining or cutting with an art knife.

NOTE: Installers should trial cutting or machining techniques on areas of scrap to ensure the highest possible finish.

Drilling

Drills designed especially for plastics are available and their use is suggested on ezoBord. Standard twist drills for wood or metal can be used; however, they require slower speeds and feed rates to produce a clean, non-gummed hole. Optimum bit speed, feed rate, and applied pressure will depend on hole size and sheet thickness. Drill speeds up to 1,750 rpm are best for smaller holes, while speeds as low as 350 rpm can work for larger holes. Twist drills used for plastics are suited to working ezoBord—they should have two flutes, a point with an included angle of 60 to 90 degrees, and a lip clearance of 12 to 18 degrees. Wide, highly polished flutes are desirable since they expel the chips with low friction and thus tend to avoid overheating and consequent gumming. Drills with substantial clearance on the cutting edge of the flutes make smoother holes than those with less clearance. Drills should be backed out often to free chips.

NOTE: When drilling be sure to hold or clamp the sheet securely to prevent it from cracking or slipping and presenting a safety hazard to the operator.

Routing

Routing with sharp two-flute straight cutters can produce a smooth edge. Routers are useful for trimming the edges of flat or formed parts, particularly when the part is too large or irregular in shape for a band saw. Routing can also be used to cut intricate designs and patterns inside the sheet.

Portable, overarm, and under-the-table routers work equally well. The ezoBord sheet should be fed to the router slowly to avoid excessive frictional heating. The router or sheet, whichever is moving, must be guided with a suitable template. Compressed air can be used during the routing operation to cool the bit and aid in chip removal.

NOTE: Installers should trial drilling or routing techniques on areas of scrap to ensure the highest possible finish.

Fixing onto a wall or other hard surface

ezoBord can be fixed in place by nail, screw, glue.

Mechanical Fastening Guidelines

Do:

- Drill holes minimum 15mm centre offset from each corner and slightly oversized to allow for thermal expansion and contraction.
- Insure drilled holes have smooth edges.
- Use washers for better load distribution and to prevent pull through.
- Use metal inserts if frequent assembly/reassembly is required.

Nails or screws should be fastened into battens or suitable substrates.

Don't:

- Over tighten fasteners.

The benefit of using mechanical fixings is that they can be removed completely without leaving residue in order to allow the ezoBord sheet to be recycled fully.

There are many options with using adhesives; however these leave some residue on the ezoBord that must be removed when recycling the panels.

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We recommend a test panel be used on the substrate to determine the most suitable fixing method and process.

ezoBord, like most sheet panel products has a tendency to flex over large spans. Although there is no set formula for fixing spans, it is reasonable to expect that fixing between 18" to 24" centres both vertically and horizontally would cause the panel to remain rigid in most circumstances.

ezoBord order customization - printing / CNC cutting

Printing on ezoBord is on a custom basis and quoted per project based on the pattern file provided by the customer. Samples to be approved in writing by the customer prior to production.

We can cut practically any shape you require out of a 4x8 sheet which is quoted per project based on the pattern file provided by the customer. Samples to be approved in writing by the customer prior to production.

ezoBord cleaning

Remove dust and dirt with a soft cloth or sponge and a solution of carpet or upholstery shampoo. Always use a soft, damp cloth and blot dry.

ezoBord warranty: ezoBord is a partially recycled, dynamic product and is warranted against manufacturing defects for a period 1 year. Variation in dye lot can occur so we suggest that a sample is requested prior to ordering for confirmation purposes.