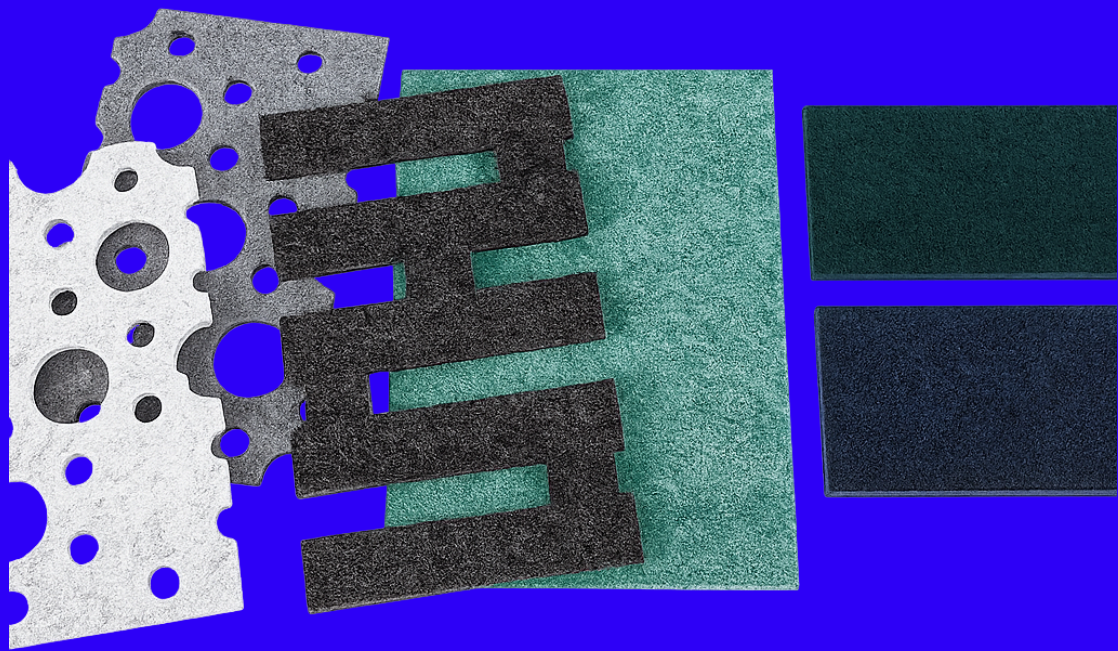


CUTTING GUIDE



PET Felt is a strong, safe material made from 75% recycled plastic bottles. It looks soft and modern, helps reduce noise, and keeps spaces warmer.





SPECIFICATIONS

Material: PET Felt

Flammability Class: B1

Acoustic Properties

9 mm board: NRC 0.45 (Class D, tested to ISO 11654). Absorbs mainly mid to high frequencies, reducing echo and sharp sounds.

12 mm board: (NRC ~0.55-0.60 Indicative) Greater absorption than 9 mm, with better performance in the mid-frequency range.

24 mm board: (NRC ~0.75-0.80 Indicative) Strong absorption across a wider frequency range, including some lower tones.

Note: NRC (Noise Reduction Coefficient) is a standard measure of how much sound a material absorbs. A higher number means better sound absorption.



PET Felt

PET felt panels are made by heating and pressing recycled plastic fibres, mostly from old bottles, into strong, dense sheets. The fibres are tangled together to form a soft but sturdy material that is both durable and easy to handle.

When cutting or shaping PET felt, it's important to use sharp tools. This makes clean cuts and stops the edges from fraying. Using blunt tools can cause the material to tear or even melt slightly from the extra friction. With the right tools, PET felt is simple to cut, shape, and use in many different projects.

Colours

Because PET felt is made from recycled fibres, slight colour variations may occur between different production batches. These differences are minor but noticeable if panels from separate batches are placed side by side. For the best result, we recommend ordering the full quantity you need at one time so that all panels come from the same batch.



MEASUREMENTS

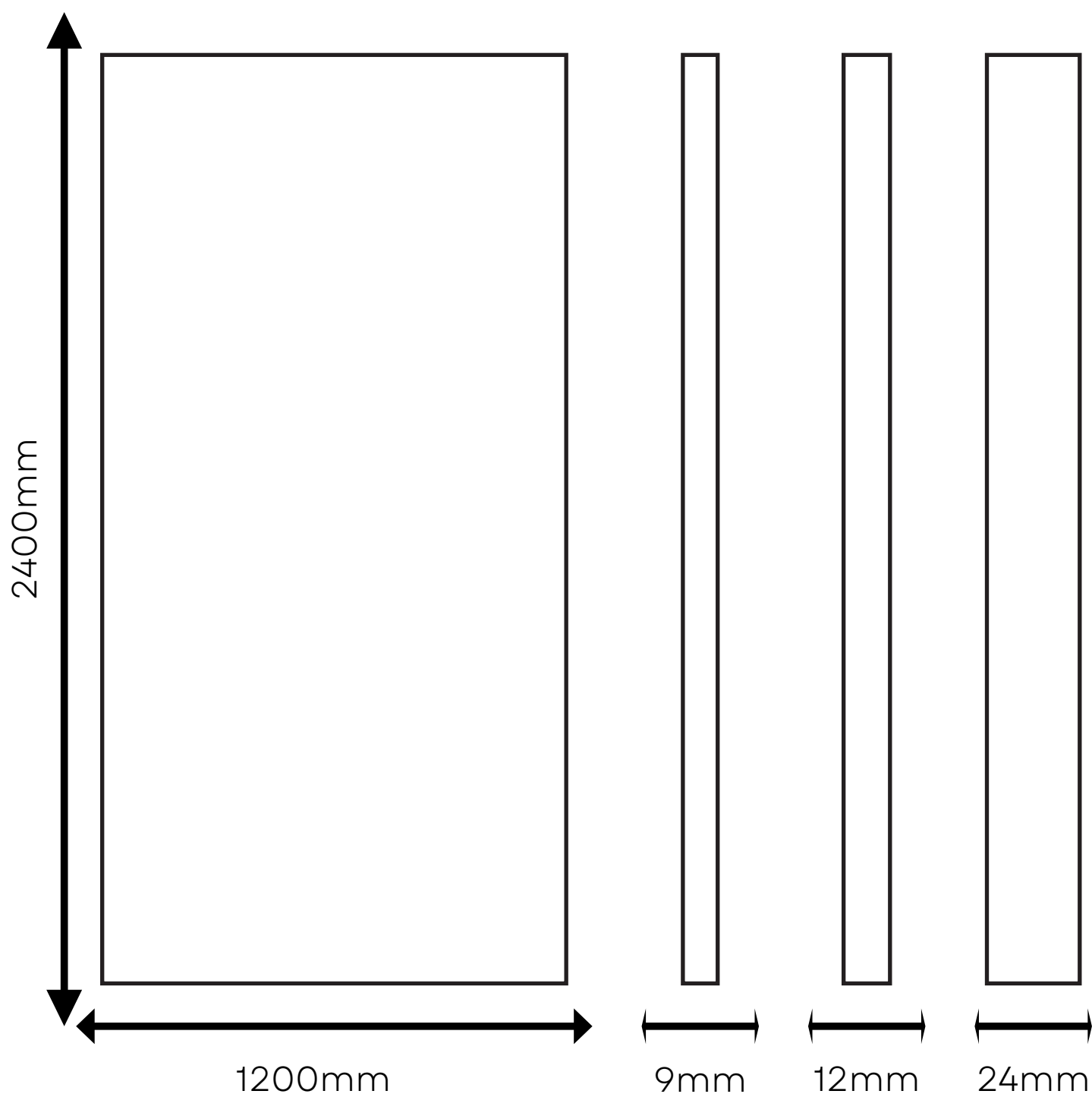
All panels are made to gross size of 2400x1200mm.

Available in 9mm, 12mm and 24mm thickness.

2400x1200x9mm weight 5.7kg

2400x1200x12mm weight 7.6kg

2400x1200x24mm weight 15.2kg





CUTTING, FINISHING & INSTALATION

To get the best results from Felted PET Felt panels, it helps to understand the different ways they can be cut and installed. This guide gives you the key steps and recommendations. Other methods may also work – the options here are just a starting point.

PROCESSING OVERVIEW

*Design indicates the ease with which Felted panels can be cut and shaped

*Volume indicates the ideal product application

Method	Design	Volume	Notes
Digital Cutting	High	Any	Longer production time for fine details
Waterjet Cutting	Very High	Medium	Costly, drying time after processing
Laser Cutting	Medium	Low	Melting and discoloured edges may occur
Die Cutting	Medium to High	High	Costly for small runs (mould required)
Manual Cutting	Medium	Low	Skill required for accurate cuts, suitable for adjustments on site
Circular Saw	Limited	Medium	Suitable for straight lines only
Jigsaw	Medium	Low	Highly dependent on skill / experience

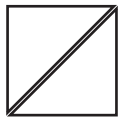


CUTTING METHODS

The following methods are for cutting Felted Pet Felt panels.

Digital Cutting

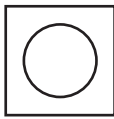
Computer-controlled cutting enables you to cut highly detailed shapes and patterns. There is no material loss and different components can seamlessly connect. This technique also provides the option to cut at different angles, as required for v-grooved or bevelled edges. The diversity of options this technique has to offer provides you with endless possibilities for design and form.



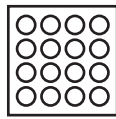
Straight Cut



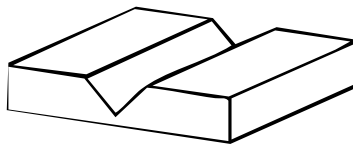
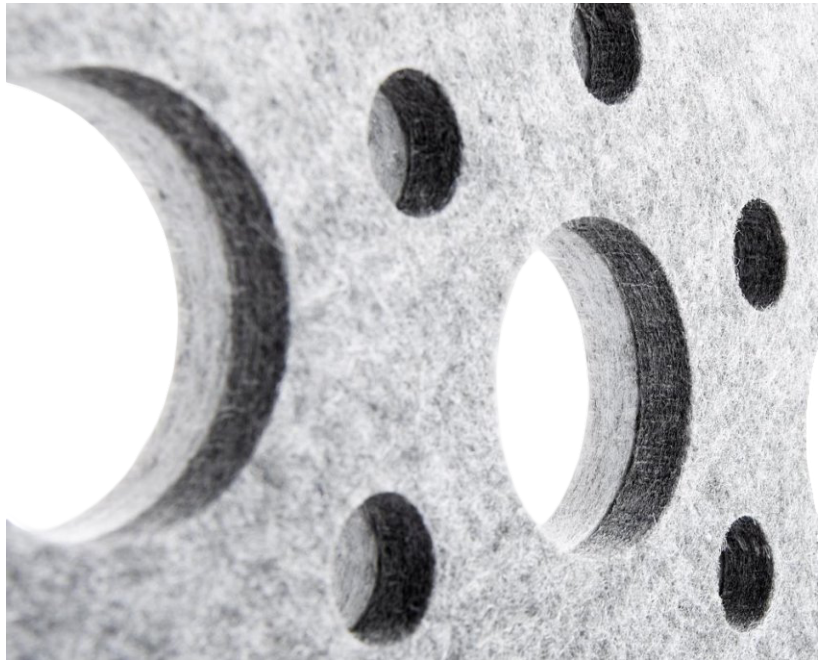
Curved Cut



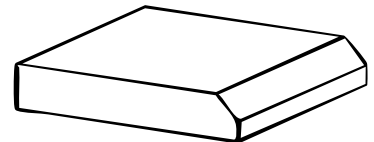
Cut Out



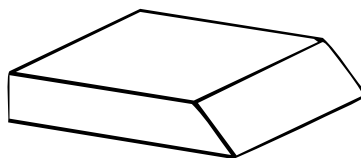
Pattern Cut



V-Cut, 2 times 45° cut



Chamfer cut 45°



Bevel cut 45°

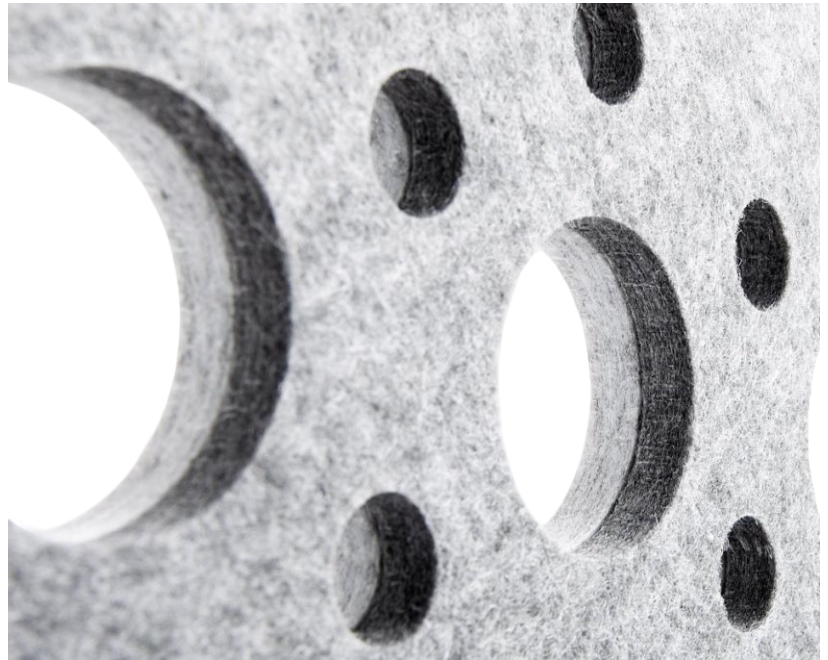
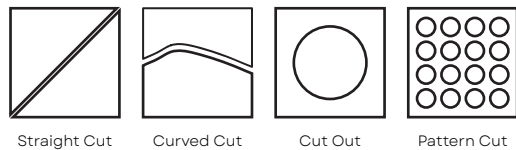


CUTTING METHODS

The following methods are for cutting Felted Pet Felt panels.

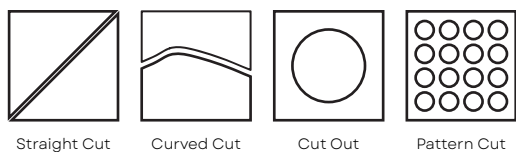
Waterjet Cutting

Waterjet cutting is a precise processing method that enables the smallest of details to be cut. Similar to the digital cutting process the cutting path can be applied almost invisibly. Highly detailed, seamless cutouts can be created. Only pure waterjet cutting is suitable for cutting Felted Pet Felt panels. This is a type of waterjet cutting without the addition of abrasive particles.



Laser Cutting

Laser cutting is precise, but it has the disadvantage of using heat for the cutting process. Due to the thermoplastic properties of the material, if using a hot laser beam, it can burn, harden and discolour the edges of the Felted PET Felt Panel. For this reason, we do not recommend this method. However, it could be suitable to use for projects where the Felted PET Felt panel is framed.



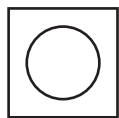


CUTTING METHODS

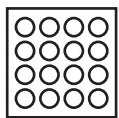
The following methods are for cutting Felted Pet Felt panels.

Die Cutting

Die-cutting is suitable for high volume production of equal sectioned panels. It is an accurate and fast production method that requires a cutting mould. These moulds need to be custom made. Production costs are therefore high for low volume production.



Cut Out

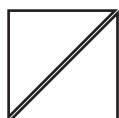


Pattern Cut

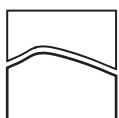


Manual Cutting

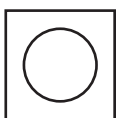
When cutting the PET Felt manually we recommend using a sharp knife combined with a ruler for the best possible result. A utility knife or precision knife will be sufficient. Cut the Felted Pet Felt one section at a time making several passes over the same cutting path for a better finish.



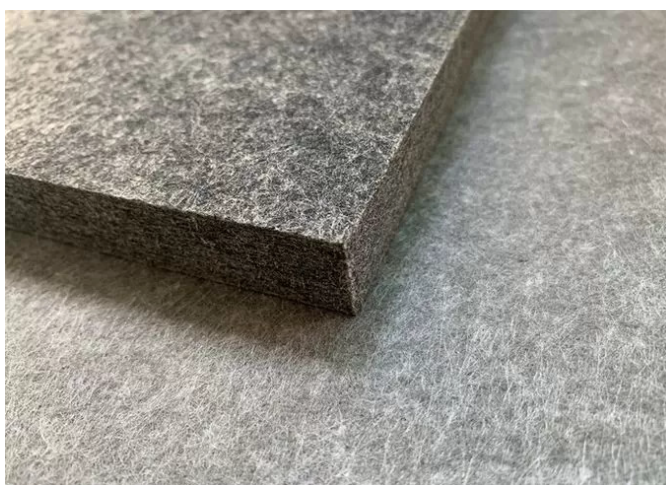
Straight Cut



Curved Cut



Cut Out





POWER TOOLS

Using Power Tools with PET Felt

You can work with PET Felt using most standard woodworking tools, like saws, drills, and routers. Unlike wood, PET Felt doesn't have a grain (because the fibers are mixed together in all directions), so you don't need to worry about cutting "with" or "against" the grain.

When cutting or drilling, you'll notice fluffy shavings coming off the material. These are called swarf – a technical term for the small waste pieces created during machining. With PET Felt, the swarf can sometimes clog the dust extractor on your tool, so it's good practice to clear it out regularly.

If your tool overheats, the swarf can smolder, leaving a burnt-plastic smell and small melted

Circular Saw

Track saws (plunge cut), table saws (pull-push saw), mitre saws are generally suitable for use with PET felt panels and often a quick way to create custom-sized PET Felt as needed. It is recommended to test the required speed of the saw with a piece of the material since some saws can be set to a different speed and blade. Our advice is to experiment with the material in order to find the right machine settings for the preferable result. Note: circular saws can also be used to create chamfered edges.



Using a Jigsaw

A jigsaw is great for cutting curves, decorative shapes, and cutouts. It's not the best tool if you need very precise shapes or exact dimensions.

When cutting, make sure the PET Felt is supported on a stable surface, as the jigsaw works best when the material doesn't move. Think of PET Felt like a thin wood panel – it has a similar flexibility, so handle it in the same way.



KERF CUTTING FELTED PET FELT

Kerf cutting is a technique that lets PET Felt bend by cutting a series of narrow channels (kerfs) into the sheet. These channels act like hinges, making the panel flexible enough to form smooth curves.

The depth, width, and spacing of the kerfs control how easily the sheet bends.

Kerfs that are close together and evenly spaced produce the smoothest curves.

To keep the panel strong, you must always leave a layer of material uncut. The thicker the sheet, the thicker this remaining layer should be.

Recommended cutting depths:

9 mm sheet → leave 2 mm, cut depth up to 7 mm

12 mm sheet → leave 3 mm, cut depth up to 9 mm

24 mm sheet → leave 6 mm, cut depth up to 18 mm

Kerfs can be cut using a table saw, radial arm saw, or similar woodworking tools. The process takes time, so it's best to experiment with depth and spacing until you find settings that give the flexibility you need.

Tip: Bend with the kerfs on the inside for maximum strength. Bending with kerfs on the outside works but is weaker. Over-bending can cause the cuts to open up too far.

Cutting Patterns for Flexibility

PET Felt can be made more flexible by adding cutting patterns. These small cuts make the material easier to bend and shape.

The type of pattern and how big or small it is will change how flexible or firm the panel feels. Different patterns give different results, so they can be chosen to suit the project.

