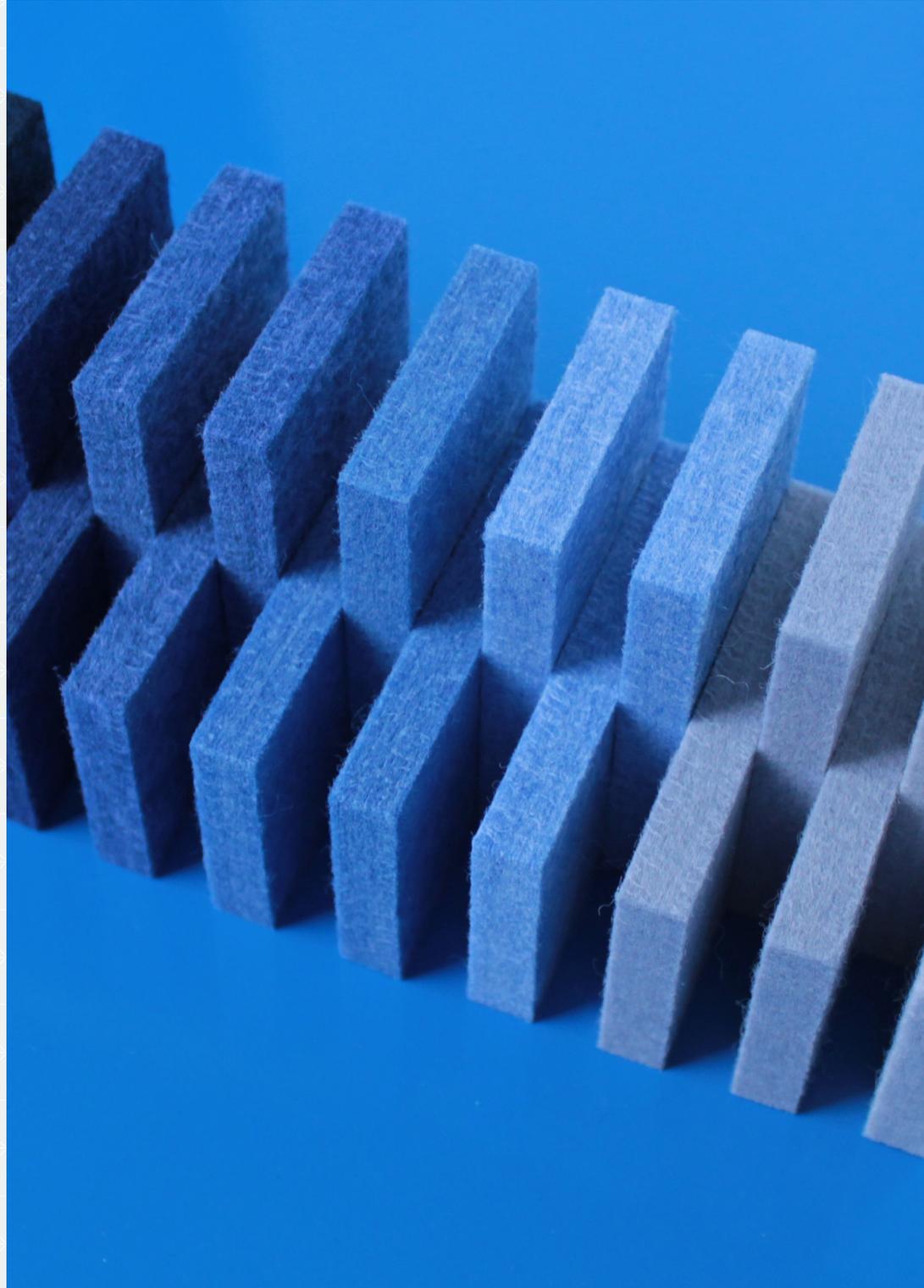


REFELT

PET Felt panels

Custom order



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E info@refelt.nl
W refelt.nl

Guide
V. 02

Make a statement with your acoustic installation

PET Felt panels allow you to create your own design, that will equally contribute to the aesthetics and acoustics of the interior. Our CNC cutting machine can create customised patterns, shapes, texts, logos or acoustic 3D models.

Discover the possibilities that ReFelt has to offer and learn how to submit a custom order.

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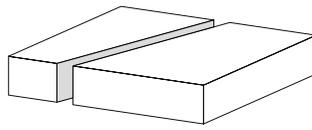
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Cutting types

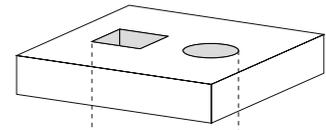
ReFelt custom-cut service offers three different cutting types. In addition to cutting through the material, the CNC machine can cut chamfered edges or v-grooves.

Thru-cut

The Thru-cut is used to cut straight through a PET Felt panel. It can also be used to make cut-outs with minimum dimensions of 10 mm by 10 mm and a minimum radius of 5 mm.

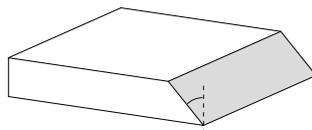


Thru-cut



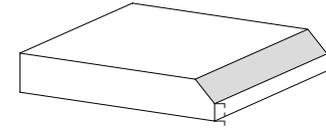
10 mm x 10 mm r min. 5 mm

Thru-cut



45°

Bevel-cut 0 mm

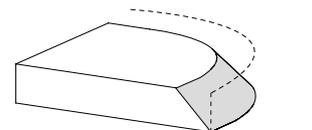


5 mm

Bevel-cut 5 mm

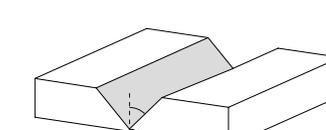
Bevel-cut

The Bevel-cut can create beveled or chamfered edges of 45 degrees. The depth can be set to 0 mm (beveled edge) or 5 mm (chamfered edge). The minimum radius for a Bevel-cut is 80 mm.



r min. 80 mm

Bevel-cut radius



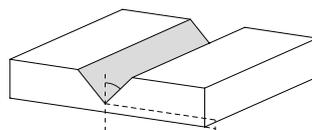
45°

1 mm

V-cut 1 mm

V-cut

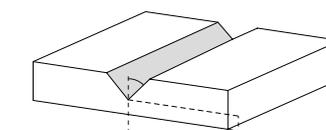
The V-cut of 90 degrees is made of two cuts of 45 degrees. The cutting line in the drawing is the centerline of the V-cut. The minimum radius for a V-cut is 80 mm. The depth can be set to 1 mm, 3 mm, 5 mm and 7 mm. When set at 1 mm, the PET Felt can be folded seamlessly in a 90 degree angle.



45°

3 mm

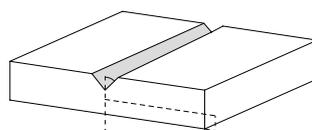
V-cut 3 mm



45°

5 mm

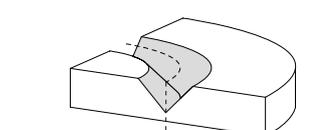
V-cut 5 mm



45°

7 mm

V-cut 7 mm



r min. 80 mm

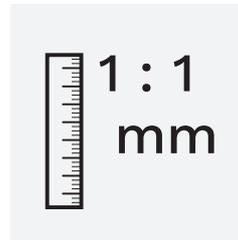
V-cut radius

File specifications

To ensure that your files for a custom order are submitted properly, a number of specifications and rules apply.

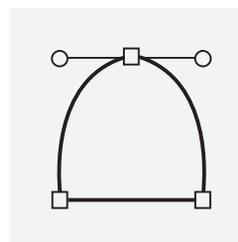
Scale 1 : 1

Files must be drawn in the actual size, scale 1 : 1. Always use millimeters as a unit of measurement.



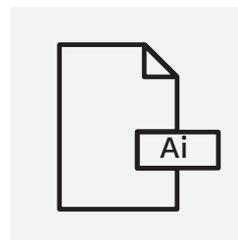
Vector-based file

All files have to be vector-based. For example, files made with Adobe Illustrator. To retain the vector information, the file must be saved or exported as an Ai-, PDF-, or DXF-file. A JPG-file is pixel-based and therefore not suitable for the CNC-cutting machine software.



Drawing

Make sure your drawing is 2D and only use vector lines. Dimensions, centerlines, guidelines, fills and hatches must be deleted.



File extension

.Ai | *.PDF | .DXF

*A .PDF-file is only suitable when it is exported as a vector-PDF. This can be done when exporting a file from Illustrator.

Computer programs

Compatible computer programs are a.o. Adobe Illustrator, Inkscape en Rhinoceros.

File name

Mention your company name and project in the file name. It is also required to mention the colour of PET Felt. Each colour that needs to be cut requires a separate file.

Example:

Company name_project_colour.ai

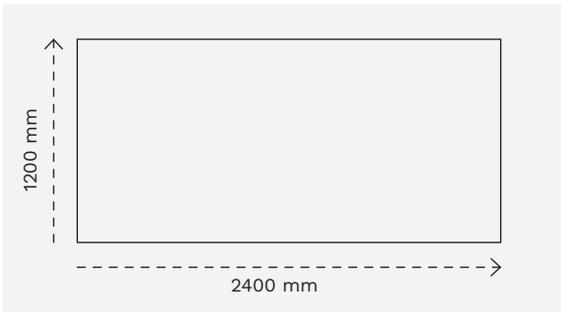
General rules for drawings

Layers Every desired cutting option needs to have a separate layer with a corresponding layer name. Please, take into account that the layer names are case-sensitive.

A Bevel-cut or V-cut layer name has to include the cutting depth.

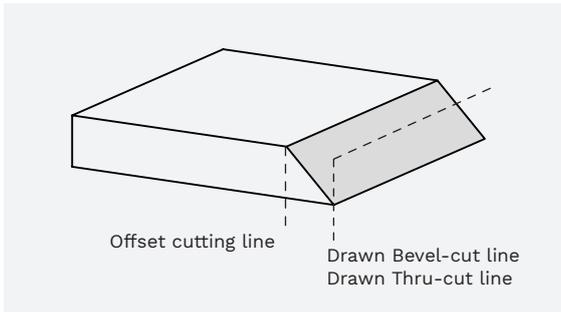
Thru-cut
Bevel-cut 0 mm
Bevel-cut 5 mm
V-cut 1 mm
V-cut 3 mm
V-cut 5 mm
V-cut 7 mm

Dimensions The maximum dimensions for a design that has to be cut out of one ReFelt PET Felt panel is 1200 mm by 2400 mm. The cutting line can be placed up to the edge of this area.

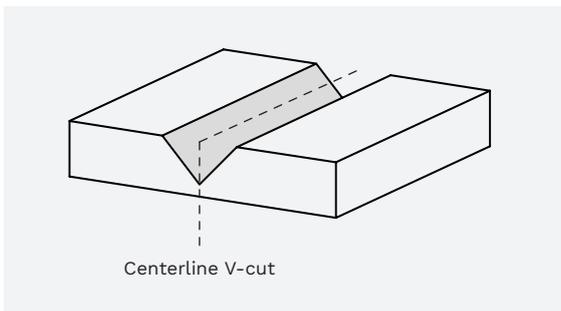


Bevel-cut The Bevel-cut always requires the Thru-cut. These two lines are the same but have to be drawn or copied in different layers.

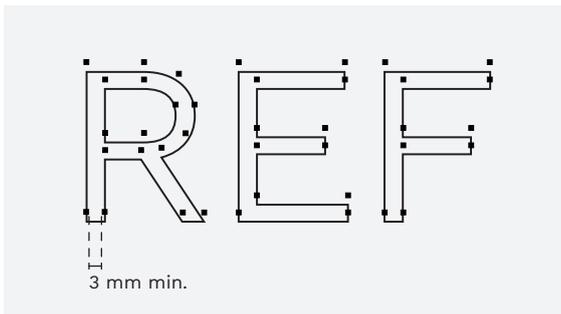
The offset of a Bevel-cut is always on the inside of the cutting line.



V-cut The V-cut only requires a centerline to be cut. It will be cut from two sides of the centerline at a 45 degree angle, resulting in a V-cut with a 90 degree angle.



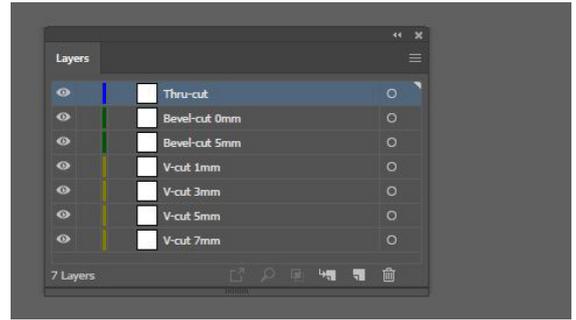
Letters Letters always have to be converted to outlines. A letter needs to be at least 3 mm thick.



Illustrator tutorial

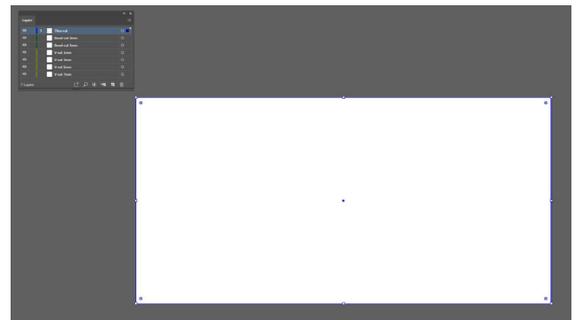
Layers

Every desired cutting option needs to have a separate layer with a corresponding layer name. Please, take into account that the layer names are case-sensitive.



Artboard

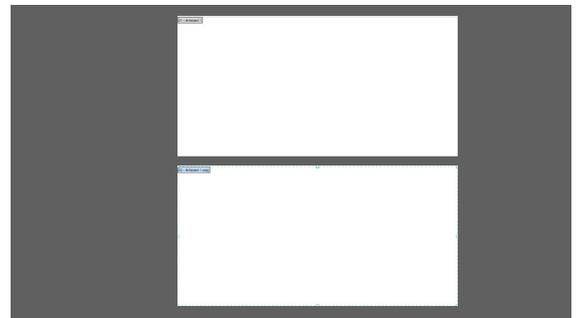
Add an artboard with the following dimensions : 1200 mm x 2400 mm. The drawing line can be placed up to the edge of this area. Please note that the borders of the artboard are not cutting lines. If you want the panel to be cut to the abovementioned size, make sure to add cutting lines at the borders of the artboard. These lines should be drawn in the Thru-cut layer and aligned with the artboard.



Multiple artboards

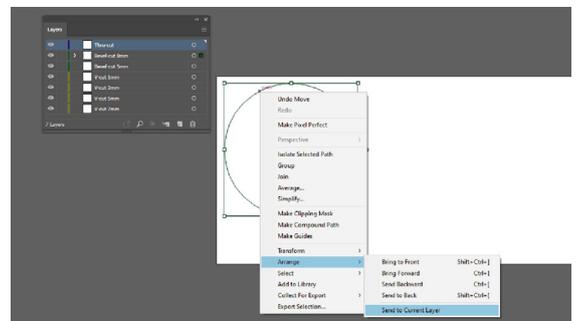
You can use multiple artboards. The software of the cutting machine will separate all artboards.

However, it is only possible to use several artboards in one file if a single colour of PET Felt needs to be cut. For every new colour another file has to be made.



Check layers

Check if everything is placed in the correct layer. If lines are placed in the wrong layer, they can be moved. Select the line that needs to be moved and click on the layer it has to move to. Right click and choose “Send to current layer” in the submenu of “Arrange”.

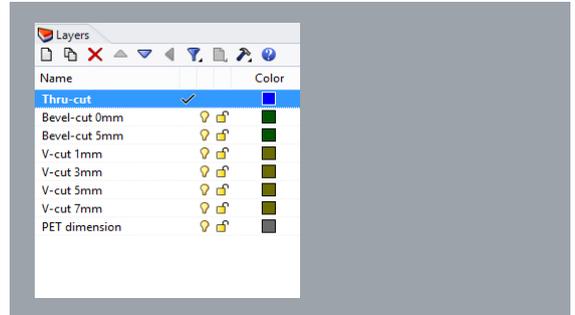


Rhinoceros tutorial

Top view Always use the top view to make sure that the drawing you make is 2D.



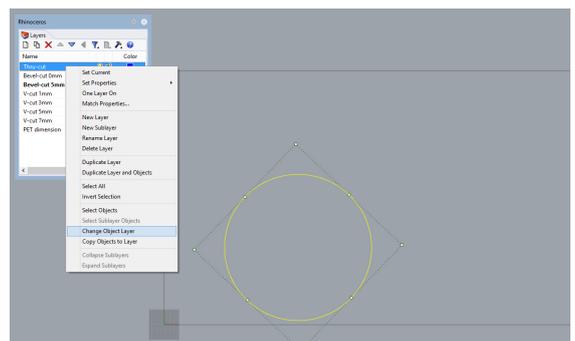
Layers Every desired cutting option needs to have a separate layer with a corresponding layer name. Please, take into account that the layer names are case-sensitive.



Panel dimensions The ReFelt template for Rhinoceros contains one layer with the dimensions of a PET Felt panel. The drawing can be made within this area. This line, however, will not be cut. The gross size of one PET panel is 1220 mm x 2440 mm. When a panel has to be cut to 1200 mm x 2400 mm, a rectangle with these dimensions has to be drawn in the Thru-cut layer.



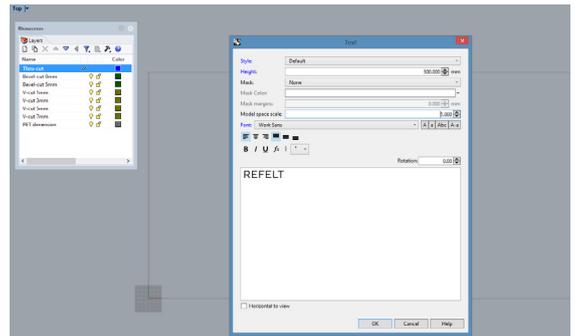
Check layers Check if everything is placed in the correct layer. If lines are placed in the wrong layer, they can be moved. Select the line and right click the layer it needs to be moved to. Choose the option "Change Object Layer".



Letters 'Explode' text objects to convert them to curves. This can be done in two ways:

Option 1

Use the command 'Text' and fill in your text and desired dimensions.



Select the text and type in the command 'Explode' to convert the text into curves.

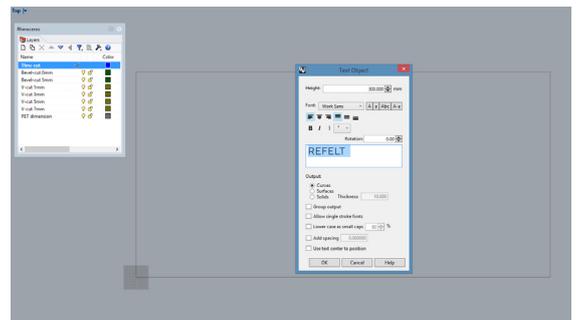


If vector-points are visible when selecting the text, it was converted into curves correctly.



Option 2

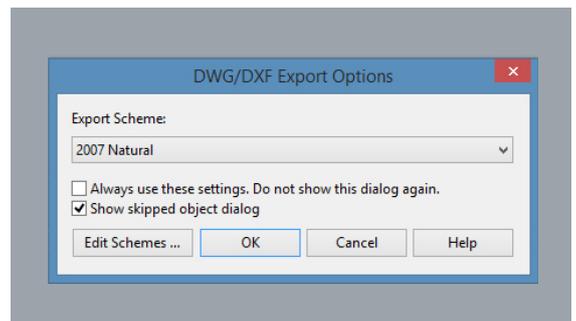
Use the command 'TextObject' and choose the option 'Curves' in the Output submenu.



Export file

Before exporting, make sure that there are no double cutting lines drawn.

Export as a .DXF with 2007 natural as 'Export Scheme'.



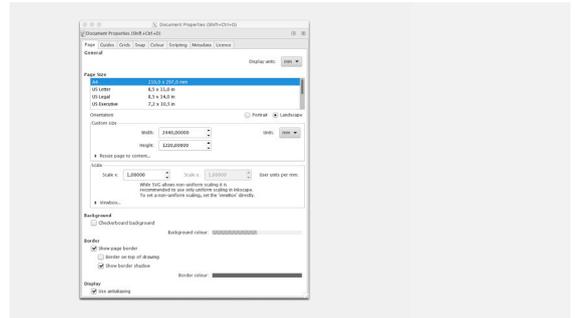
Place order

Send your file and a corresponding request to info@refelt.com

Inkscape tutorial

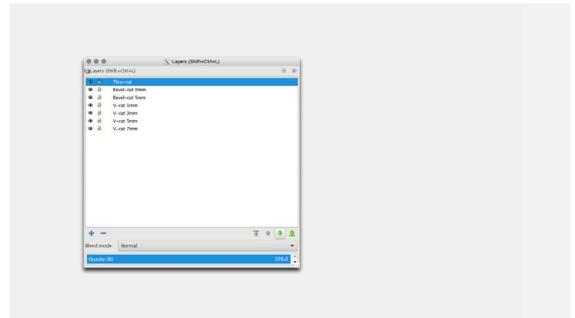
Document properties

Set the page size to 2400 mm x 1200 mm in the custom size settings. This will give an indication of the PET Felt dimensions. Use millimeters as measurement units.



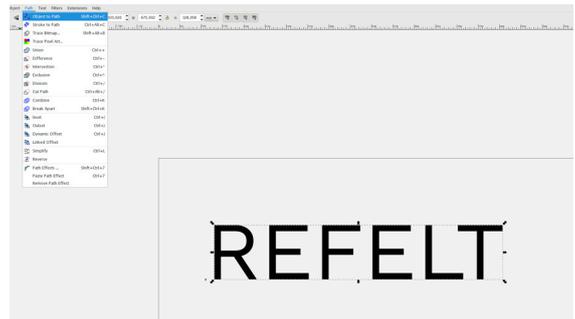
Layers

Every desired cutting option needs to have a separate layer with a corresponding layer name. Please, take into account that the layer names are case-sensitive.



Letters

Letters have to be converted to lines in order to cut them. This can be done by selecting the text and choosing 'Object to Path' in the dropdown menu of 'Path'.



Letters

Set the fill of a text to 'no paint' and the stroke to black to be able to see the text.



Save as DXF Before exporting, make sure that there are no double cutting lines drawn.

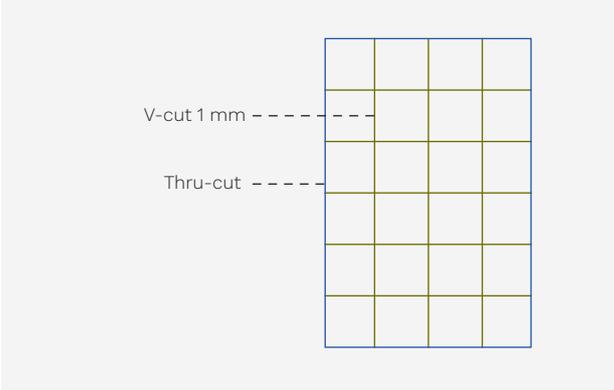
Export as a .DXF choosing the option LWPOLYLINE and millimeters as measurement units. Make sure all layers are exported.



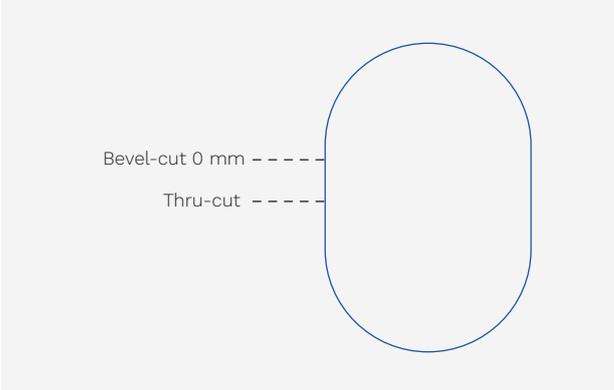
Order Send your file and a corresponding request to info@refelt.com

Examples

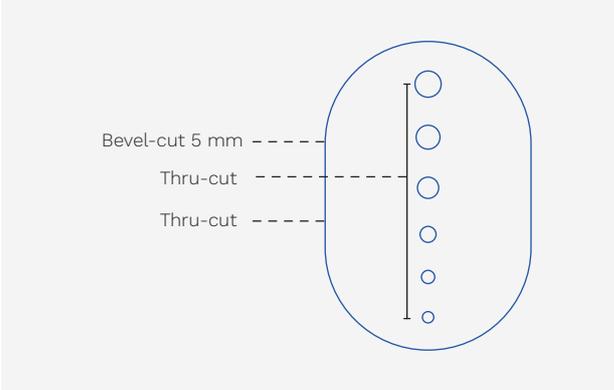
V-cut 1 mm



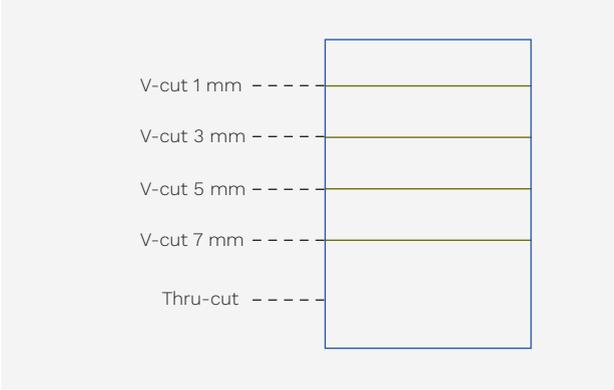
Bevel-cut



Bevel-cut



V-cut



Terms and conditions

The general terms and conditions of ReFelt apply to custom orders, these additional terms and conditions apply where they differ from the general terms and conditions.

ReFelt custom order service

In addition to selling PET Felt panels, ReFelt offers the option to custom cut PET Felt panels based on a cutting drawing supplied by the customer. ReFelt does not provide the service of making cutting drawings, adjusting the existing cutting drawings or developing ideas into products.

Liability

ReFelt is not liable for errors occurring as a result of incorrectly accumulated cutting drawings. All supplied cutting drawings must meet the specifications as stated in this document.

Intellectual property rights of the client

The customer retains the intellectual property rights of their production drawings. Neither will we make production drawings submitted to us public, nor will we provide them to third parties without the explicit consent of the customer. The customer must possess all relevant ownership or use rights of the supplied models and production drawings. ReFelt assumes that the customer has these rights. ReFelt cannot be held liable for claims related to intellectual property rights of supplied models or production drawings. We reserve the right to refuse orders if there is a suspicion that the customer does not have the necessary property rights if a model or production drawing goes against the legal provisions or at our own discretion.

Prices

ReFelt can only determine prices for custom orders on the basis of a digitally submitted cutting drawing that meets the specifications stated in this document. Any changes made to the cutting drawing after the quotation has been issued may influence the price, in such case, the customer may be charged with the additional costs.

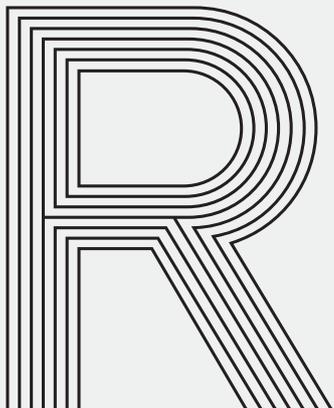
Guaranty

We only guarantee that the custom order will meet the specifications of the submitted cutting drawing. A cutting drawing provided by the customer, if not otherwise stated by the customer, will be interpreted as a final production cutting drawing.

ReFelt does not reimburse products if any defect occurs due to a design flaw. If a product does not meet the specifications of the supplied drawing, the customer must immediately inform us in writing. Returns of delivered products may only take place after confirmed in writing by ReFelt, whereby ReFelt is entitled to issue instructions regarding the manner of shipping.

Returns

Custom orders can not be returned.



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