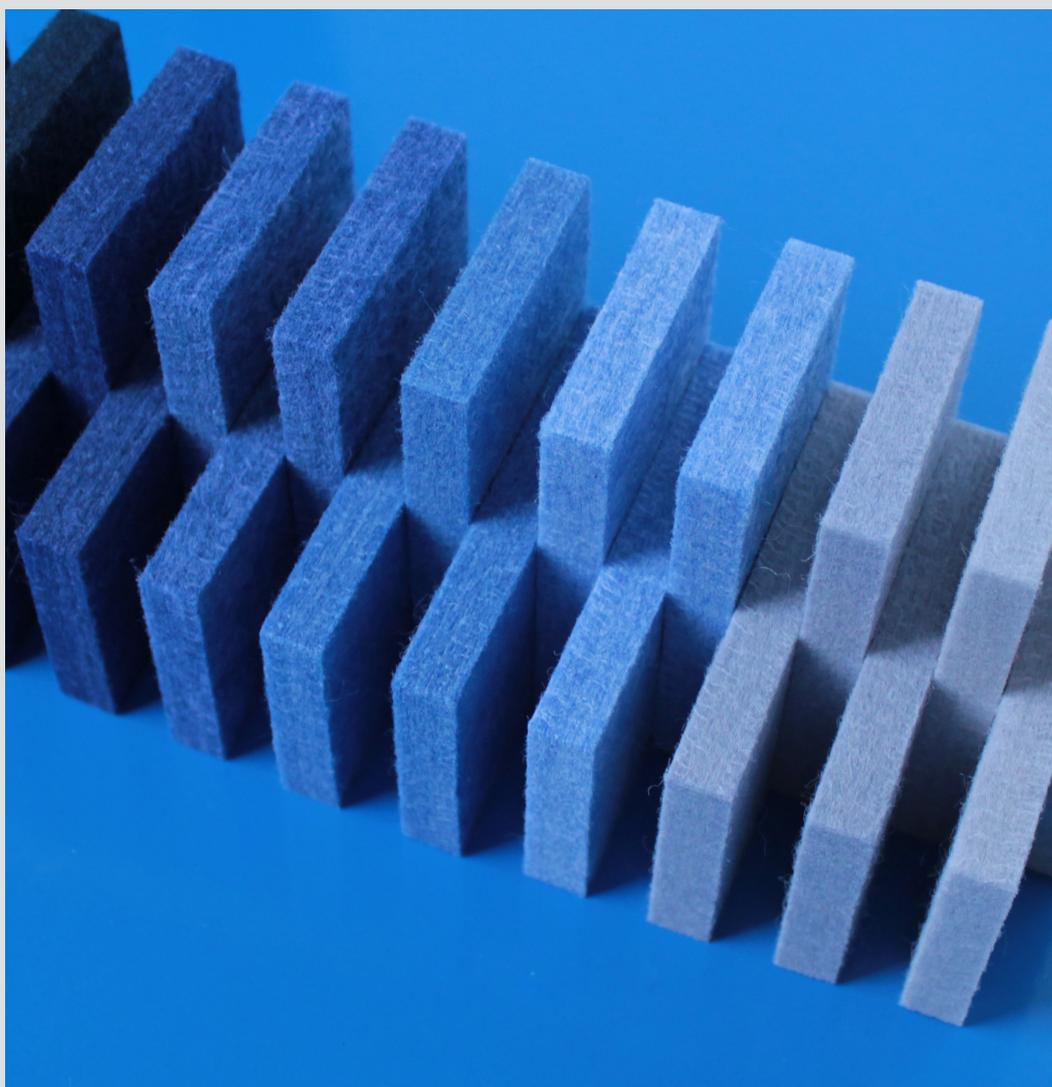


REFELT

CUSTOM ORDER



Custom cutting service

From concept to reality,
bring your ideas to life with
ReFelt.

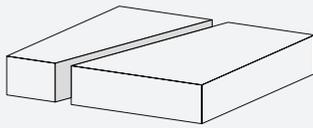
Our CNC cutting machine can create your own customised patterns, shapes, texts, logos or acoustic 3D models. Discover the possibilities that the ReFelt custom-cut service has to offer and learn more about the do's and don'ts for supplying your cut files.

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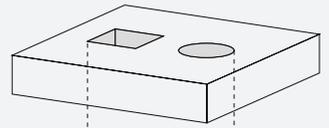
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Cut possibilities

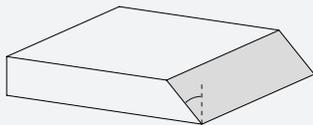
ReFelt's custom cut service offers three different cutting possibilities. In addition to cutting through the material, the cutting machine can cut chamfered edges or v-grooves.



Thru-cut

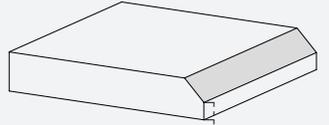


Thru-cut



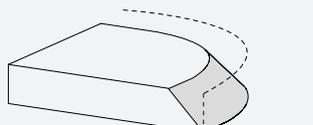
45°

Bevel-cut 0mm



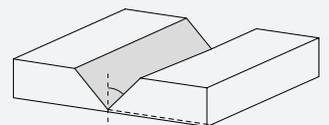
5mm

Bevel-cut 5mm



r min. 80mm

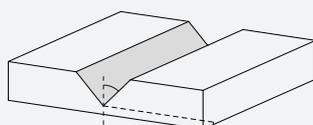
Bevel-cut
radius



45°

1mm

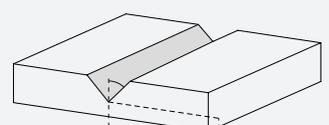
V-cut 1mm



45°

3mm

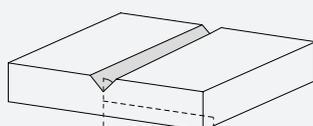
V-cut 3 mm



45°

5mm

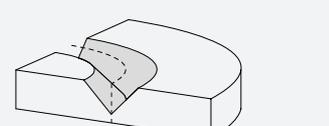
V-cut 5 mm



45°

7mm

V-cut 7 mm



r min. 80mm

V-cut
radius

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 a minimum dimension of 10mm by 10 mm and a minimum radius of 5mm.

Bevel-cut

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

V-cut

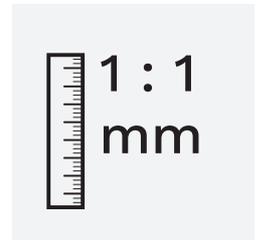
The V-cut of 90 degrees is made by two cuts of 45 degrees. The cutting line in the drawing is the center line of the V-cut. The minimum radius for a V-cut is 80mm. The depth can be set to 1mm, 3mm, 5mm and 7mm. When set at 1mm, the PET Felt can be folded seamlessly in a 90 degree angle.

Cut file specifications

To ensure cut files for a custom order are made as efficiently as possible, a number of specifications and rules for drawing a file apply.

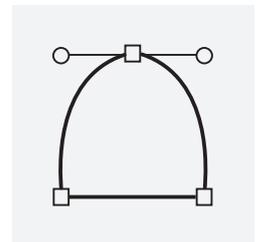
Scale 1 : 1

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



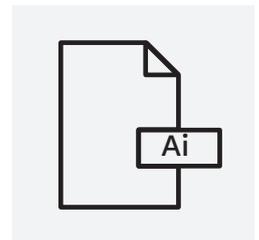
Vector-based file

Cut files require to be vector based-files. 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 in 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 drawing

Layers

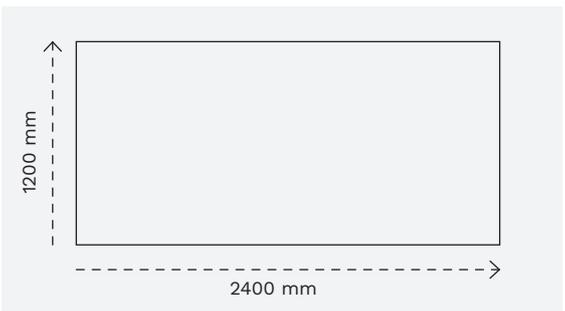
Every desired cutting option needs to have a separate layer with a corresponding layer name. Please, take into account that the layer names are case-sensitive.

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

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

Dimensions

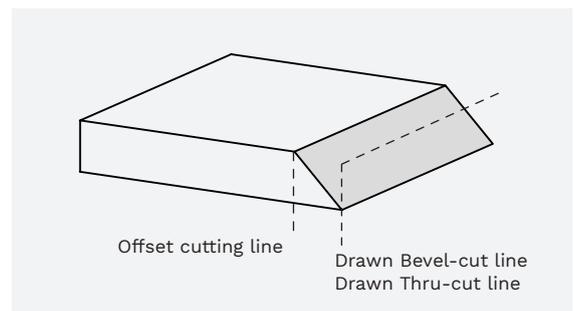
The maximum dimensions for a design that has to be cut out of one ReFelt PET Felt panel is 1200 mm by 2400 mm. The cutting line can be placed up to the edge of this area.



Bevel-cut

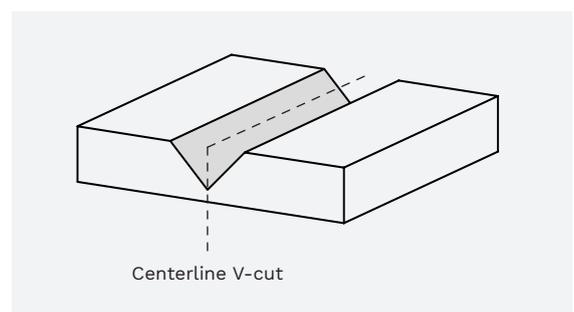
The Bevel-cut always requires the Thru-cut. These two lines are the same but have to be drawn or copied in different layers.

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



V-cut

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



Letters

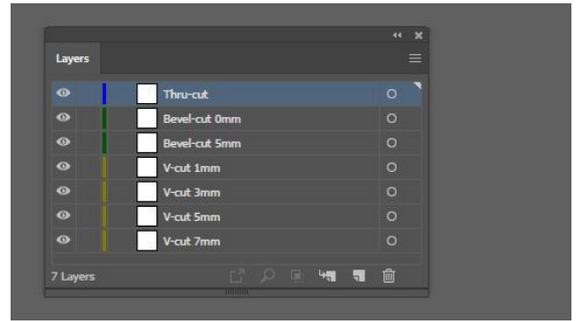
Letters always have to be converted to outlines. A letter needs to be at least 3mm thick.



Illustrator tutorial

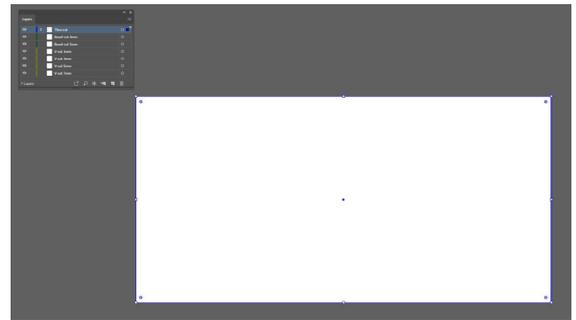
Layers

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

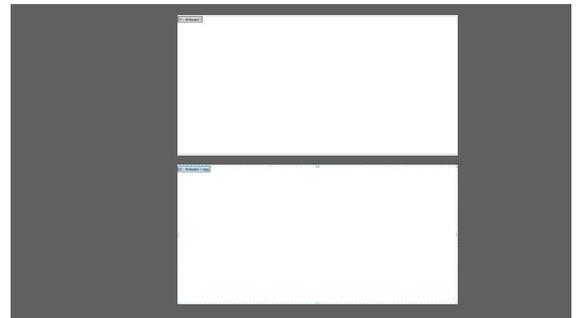
Add an artboard with the following dimensions : 1200mm x 2400 mm. The drawing line can be placed up to the edge of this area. Please notice, the artboard is not a cutting line. When required, the PET Felt panel will be cut to these dimensions, a rectangle with these dimensions has to be drawn in the Thru-cut layer and has to be aligned with the artboard.



Multiple artboards

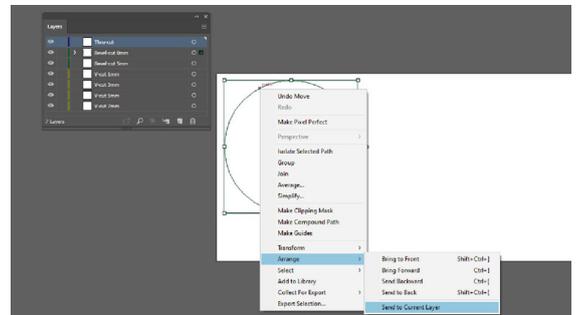
You can use multiple artboards. The software of the cutting machine will separate all artboards.

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

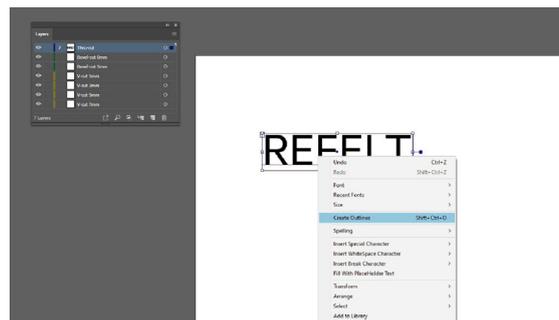
Check if everything is placed in the correct layer. If lines are placed in the wrong layer, they can be moved. Select the line that needs to be moved and click on the layer it has to move to. Right click and choose “Send to current layer” in the submenu of “Arrange”.



Illustrator tutorial

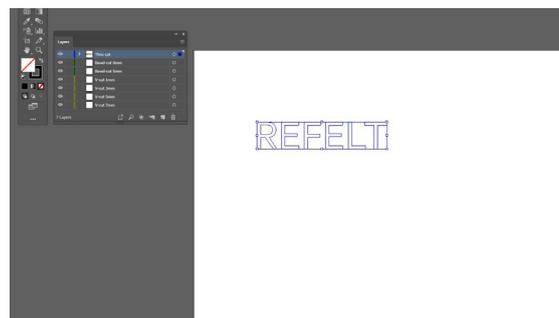
Letters

Letters need to be converted to outlines. This can be done by selecting a text and right clicking it, then choosing the option “Create Outlines” .



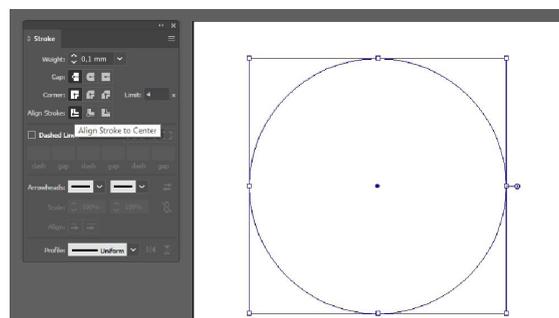
Letters

Set the fill of a text to none and the stroke to black to be able to still see the text.



Stroke settings

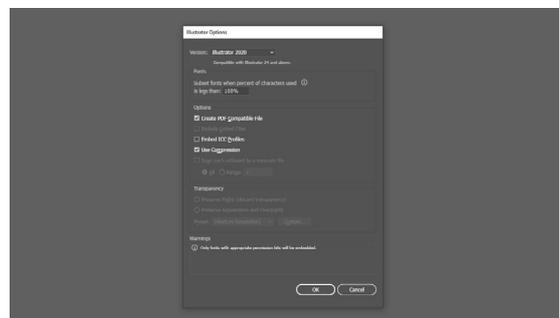
Only use lines without a fill-colour. Make sure all lines are “center aligned” and do not use any dashed lines. When your stroke is set to center alignment, lines will be cut in the middle of the visible lines you draw. The weight (thickness) setting of a stroke does not influence the actual cutting line. Please, check if there are no double cutting lines drawn before saving the file.



Save file

Save the file as an Illustrator, ai-file.

Make sure the option “Create PDF Compatible file” is enabled.



Place order

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

Rhinoceros tutorial

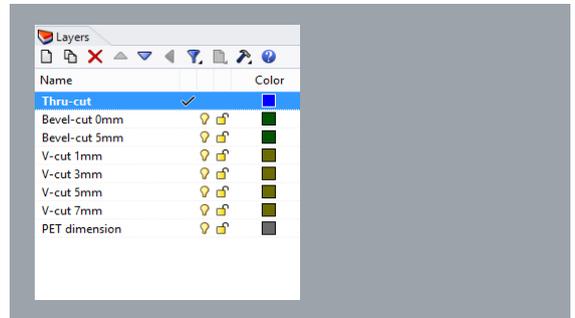
Top view

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



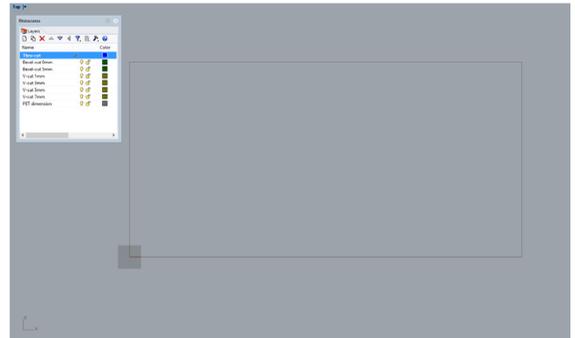
Layers

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.



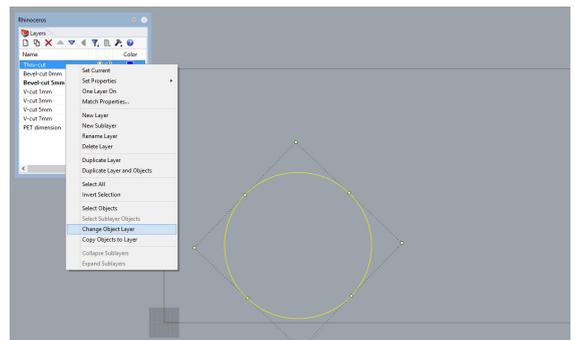
PET dimensions

The ReFelt template for Rhinoceros contains one layer with the PET dimension. The drawing can be placed up to the edge of 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

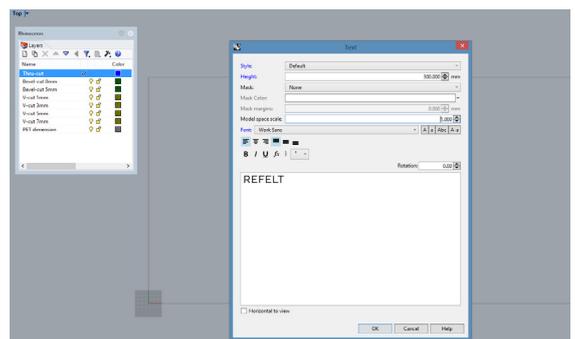
Check if everything is placed in the correct layer. If lines are placed in the wrong layer, they can be moved. Select the line and right click the layer it needs to be moved to. Choose the option "Change Object Layer".



Letters

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

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



Rhinoceros tutorial

Letters

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



Letters

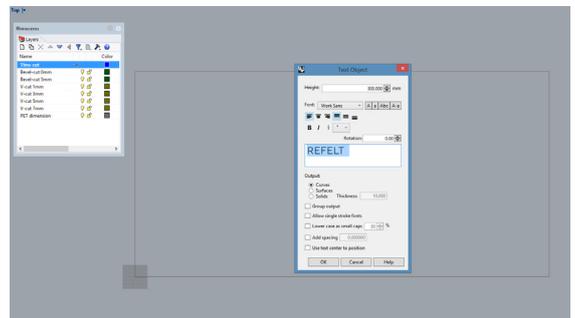
If vector-points are visible when selecting the text, it was converted into curves correctly.



Letters

The second option is:

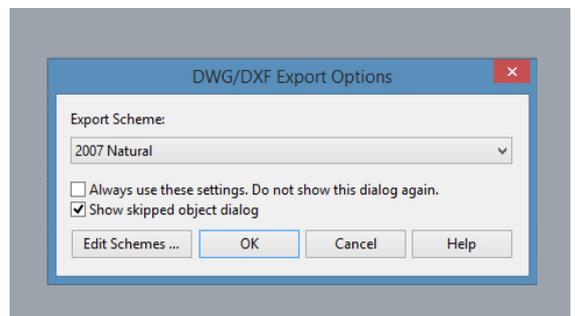
2. Use the command 'TextObject' and choose the option 'Curves' in the submenu Output.



Export file

Before exporting, check if there are no double cutting lines drawn. A double-cutting line will lead to a poor quality of the edges.

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



Place order

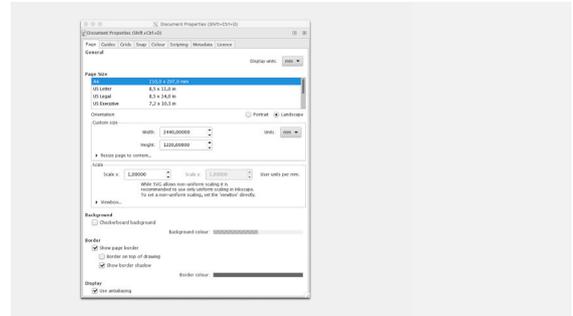
Send your file and a corresponding request to info@refelt.com

Inkscape tutorial

Inkscape is an open-source vector-editing program. It is available for Windows, OSX and Linux. For more information, please, see inkscape.org

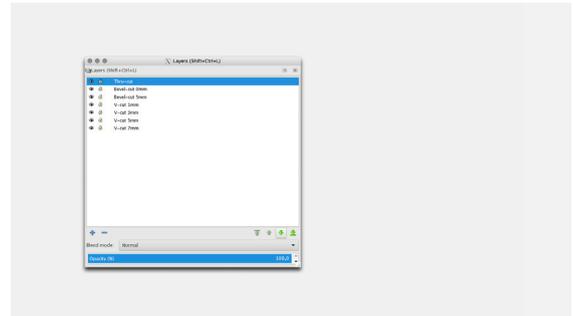
Document properties

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.



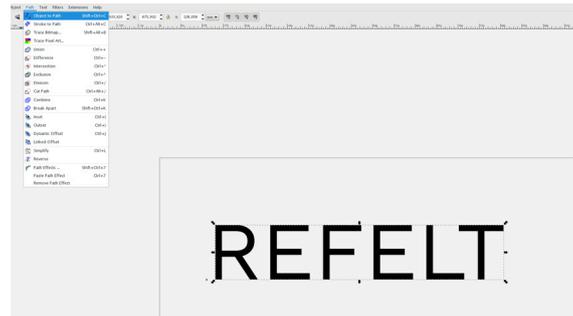
Layers

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

Make sure that the fill is set to 'No paint' and the stroke is set to a colour.



Inkscape tutorial

Save as DXF

Before exporting, check if there are no double cutting lines drawn. A double-cutting line will lead to a poor quality of the edges.

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

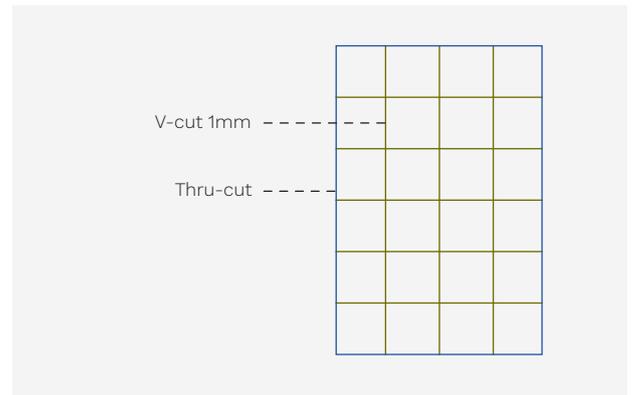


Order

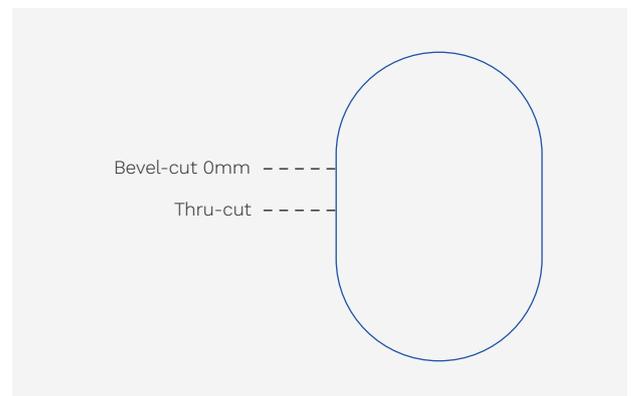
Send your file and a corresponding request to info@refelt.com

Examples

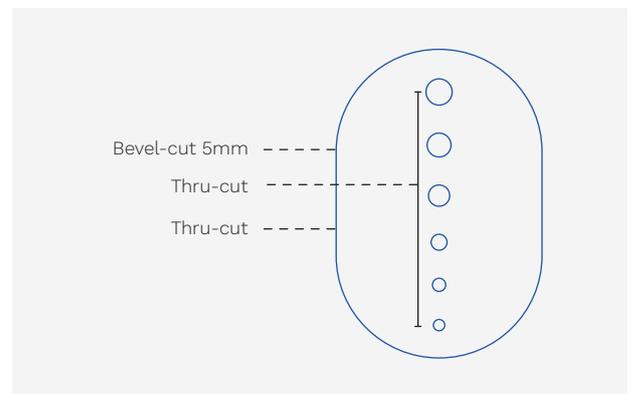
V-cut 1mm



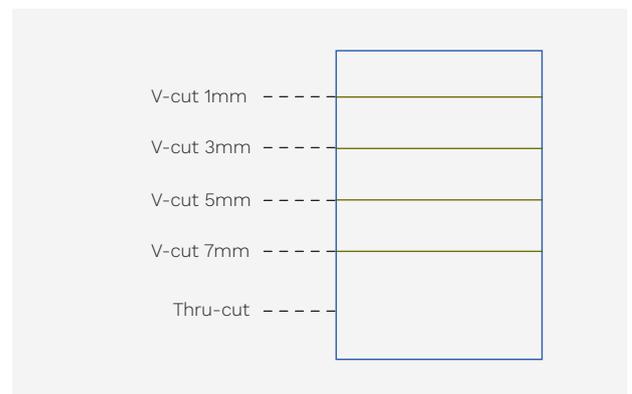
Bevel-cut



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.

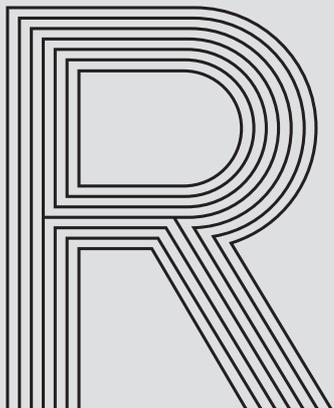
Guaranty

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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w refelt.com

