How to produce Textile Separation Panels with HP Latex or HP Stitch

This document will explain how to produce Textile Separation Panels



Introduction



As the world slowly starts to come out of confinement, we are re-thinking how we keep our distance in public spaces. Organizations like retailers, restaurants, and office buildings are rapidly having to re-design their interiors to guard the safety of their employees and customers. Separation panels help to guarantee a safe distance between individuals, and also help to shield them from the pathogen carried through the air when someone sneezes, coughs, or breathes too close by.

Separation panels can be made of many materials, ranging from cardboard to acrylic and textile. Considering that these separation panels will possibly be a reality for a few months or longer, many business owners are starting to consider making these separation panels visually pleasing. HP Latex inks can offer a number of interesting benefits for any business owner who wants to enhance their functional panels to become decorative *and* functional.

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What do we need?





Textile



HP Latex Printer/ HP Stitch Printer



Cutting Device

Screen Structure

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Software tools (RIP, image editor, etc.)



Silicon Edge



Sewing machine (optional)



How to prepare the substrate





1. Select Structure

Most dividing panel structures are made of aluminum, to ensure strength with low weight.

They often include a foam in the core to provide a soft touch and acoustic isolation properties.

Considerations: Silicone Edge Profile

In order to fit the textile into the structure, the aluminum frame needs to be designed to hold a Silicone Edge type of fixation.

This means the beams should include a space of approx. 5 mm where the silicone edge will be inserted.

The process of installing the silicone edge will be explained in future chapters of this cookbook.

Considerations: Structure Dimensions

There are many sizes and shapes for dividing screens.

Most structures have a rectangular shape.

The most common dimensions for dividing screens are:

- Office Screens : height:100-180 cm; width: 700-180 cm
- Desk Top Panels : height: 35-50 cm; width: 600-1200 cm

How to prepare the substrate





1. Select Substrate

The most common material used is polyester fabric.

If using an HP Stitch Printer, make sure the fabric does not include any type of coating.

If using an HP Latex printer, natural fibers like cotton can also be used.

Considerations: Roll Size

Choose the media width that best fits your screen structure.

Take into account that a small **margin** will be necessary in order to install the fabric inside the structure.

Considerations: Fire Retardancy



Fire retardancy is often a requirement for any furniture inside offices and public buildings.

Make sure the fabric used is fire retardant and complies with local regulations.

Considerations: Acoustic Properties

The following fabrics are specifically designed to absorb sound waves in noisy atmospheres like offices. They are also fire retardant and Certified for HP Latex printers:

- Pongs PrintTex Silencio 2.5
- Pongs PrintTex Silencio 5
- Pongs PrintTex Silencio 10
- Neschen FILMOtex Silencio 2.5 White PTX
- Neschen FILMOtex Silencio 5 White PTX
- Neschen FILMOtex Silencio 10 White PTX

These materials are not recommended for the HP Stitch, as their physical structure can get damaged during the calendering process.

Considerations: Durability

If using an HP Stitch printer, prints Will be very durable.

If using an HP Latex printer, certain fabrics offer a durability which prevents the images from getting damaged while cleaning/rubbing.

Look for these icons on the HP Media Locator for extra-durability: https://www.printos.com/ml/#/homeMediaLocator



Machine washing is not recommended for Latex prints. Most noise cancelling textiles mentioned above show optimal durability.

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Preparing the job





1. Create the Image

Create the graphic using standard design tools (Photoshop, Illustrator...).

Make sure the image size fits the characteristics of your screen structure.

Take into account a small margin will be necessary in order to install the fabric inside the structure.



2. Add Cutting Marks (optional)

If you plan to use an automatic cutter, create the cutting job for your image through your RIP.

Check if your screen structure requires any special shapes or perforations.



Once the job is selected and the substrate is ready, we're almost ready to print.

First we need to select the right printing settings. These settings are found within the **substrate presets**.

Selecting print settings





Use different media presets based on the substrate being used





Substrate presets

Many substrates have been tested at HP on different Latex and Stitch printers. In some cases, presets have been created for specific substrates and printers and are available to download from the HP Media Locator:

https://www.printos.com/ml/#/homeMediaLocator

Find the right profile by filtering for printer and substrate type.

If the substrate you need to print on has a substrate preset available, we recommend downloading, installing, and using it on your printer and RIP.

If there is no substrate preset for the specific substrate being used, using the "Generic" preset for your substrate's type (Textile) may be a good starting point option.

The printing process



- Rip the artwork after selecting the corresponding substrate preset. Send the output to the printer's queue.
- 2. Load the substrate on the printer using the specific preset previously selected.
- If the material is porous, install the Ink Collector. The "Silencio" textiles mentioned previously require 3 this accessory.
- Follow the loading process for your printer. Consider using the Media Loading Accessory for 4. flexible and light textiles. (L1X0, L2X0, L3X0, L5x0, S300, and S500)
- 5. Use the take-up reel if needed. We recommend using it for large jobs. (L1X0, L2X0, L3X0, L5x0, S300, and S500)















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After Printing











0. Calender (HP Stitch only)

Calender the prints to sublimate the ink and reach the desired color saturation and durability

1. Cut the Prints

Use manual tools or an automatic cutter to bring the print to the desired size and shape.

Drill holes and apply grommets (if needed on the support mechanism).

2. Apply Silicone Edge

Most screen structures require a Silicon Edge (SEG) around the image to fix the fabric.

The most common way of applying an SEG is by sewing it using a **sewing machine**.

There are also the following alternatives:

- Self-adhesive SEG (<u>bannerups.com/kedertape</u>)
- Hammer-applied SEG (<u>www.roffelsen.com</u>)

3. Install on Screen Structure

Fit the SEG into the aluminum screen structure by applying pressure manually.

The fabric can be removed and changed while reusing the structure.

NOTE: Using a plastic protector on the parts of the sewing machine rubbing the fabric will prevent damage to the image.

NOTE: Also sew on a small strip that can be pulled to allow easier removal of the fabric from the structure.

NOTE: Check the following video for more information about installing Textiles into aluminum frames: <u>https://youtu.be/QVXK-8STk98</u>

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Learn more at: www.hplatexknowledgecenter.com

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