Tutorial **Creating patterns**

This tutorial explains how to create patterns in Image Editor.

Download the Asanti Sample Files via the Asanti Client (Help > Asanti Online > Download Sample Files).

1. Create a pattern by numbers

1. File>New Layout Job.
2. Select a printer.
3. Set sheet size to e.g. 1000x700 mm.
4. Open the Finishing inspector.
5. Set Finishing Margins to "From Edge 5, between 5".
6. Import image "Leaves or circles.pdf".
7. Double click the image to open it in Image Editor.
8. Enable Step & Repeat (make pattern) (1). All step & repeat settings are shown in the inspector.

- The product size is set to "From pattern" (2). With this setting, the size of the full pattern (Product size) is automatically calculated depending on the settings of the pattern.

- By default the Horizontal and Vertical repeat are set to 1. This means the Product size is equal to the original image size: 200 x 200 mm (3).

9. Set both Horizontal and Vertical repeat to 3. This creates a pattern of 3 by 3. The product size is automatically set to 600 x 600 mm.
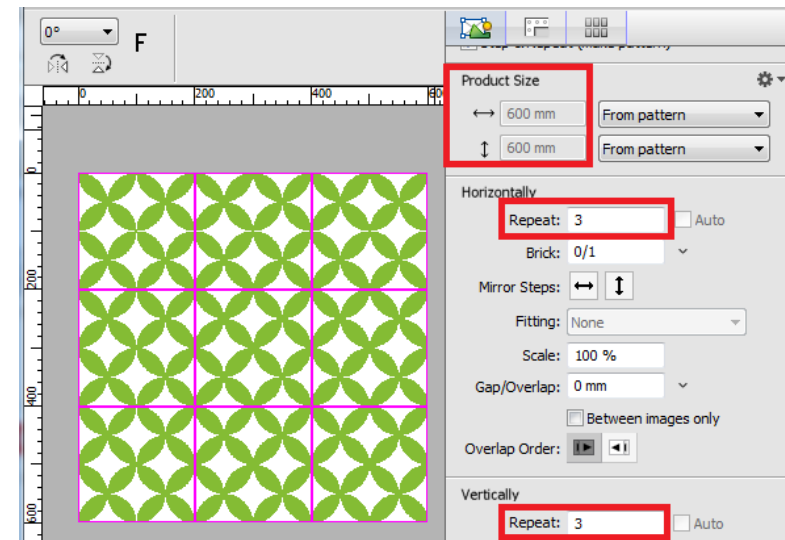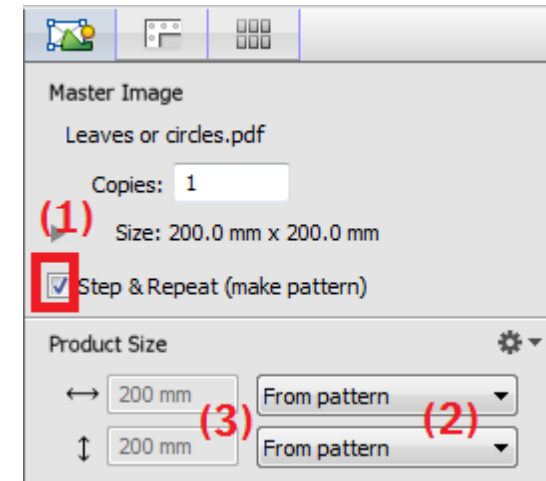
10. The Magenta lines indicate the positions of the cells (original image) inside the pattern and will not be printed. Open the Viewing options palette. Turn off the viewing option "Motif" to hide the magenta lines.
11. Turn on the viewing option "Motif" again and close the View options palette.
12. Click Apply to return to Layout Editor. The available images pane displays a thumbnail of the complete pattern. The size is set to 600 x 600 mm.
13. Drag the pattern to the sheet.
14. Submit the job > Make and Hold".
15. From the results tab, open raster preview. The pattern is rendered without gaps between the cells. The edges of the cells seamlessly match up with each other.
16. Close raster preview.
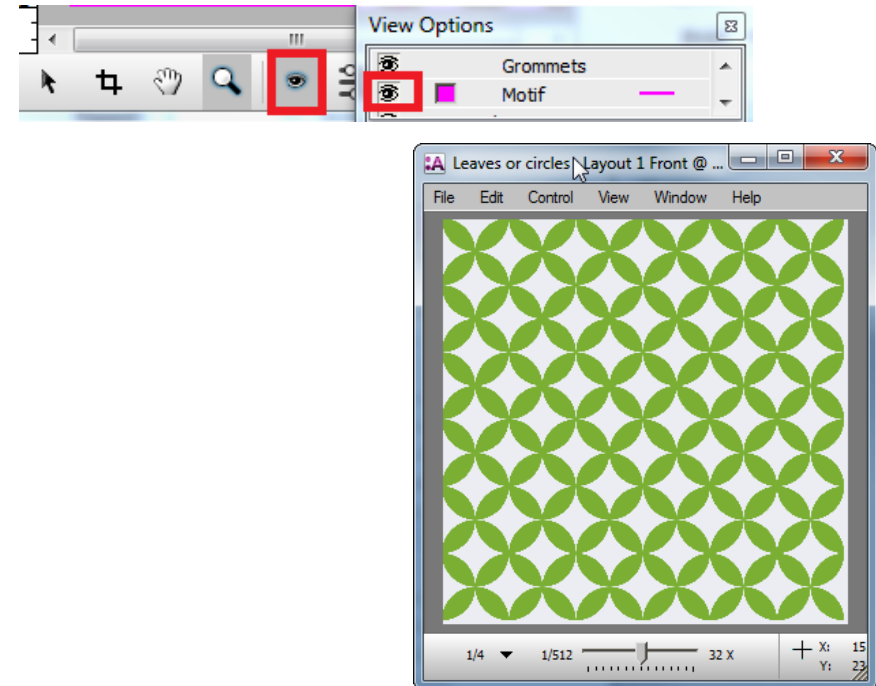
## 2. Create a pattern for a specific product size

1. Edit job "Leaves or circles".
2. Edit the image in Image Editor.
3. Change product size horizontally and vertically to manual 700 mm (1).

- The repeat (2) is set fixed to 3 x 3.

- The fitting (3) is set to Fit gaps.

4. Enable horizontally and vertically "Between images only" (4) to get only gaps between the cells.
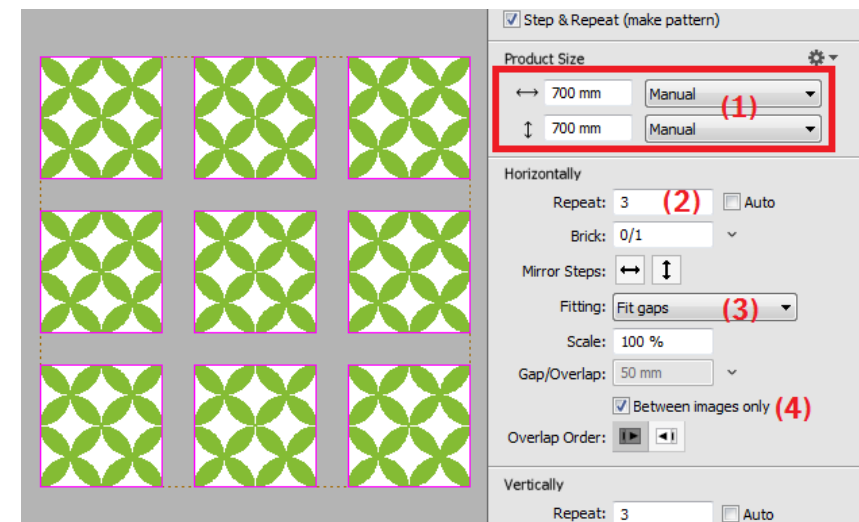
5. Change horizontally fitting to Fit Scale (5). This scales the 3 cells horizontally to the product width with no gaps in between.
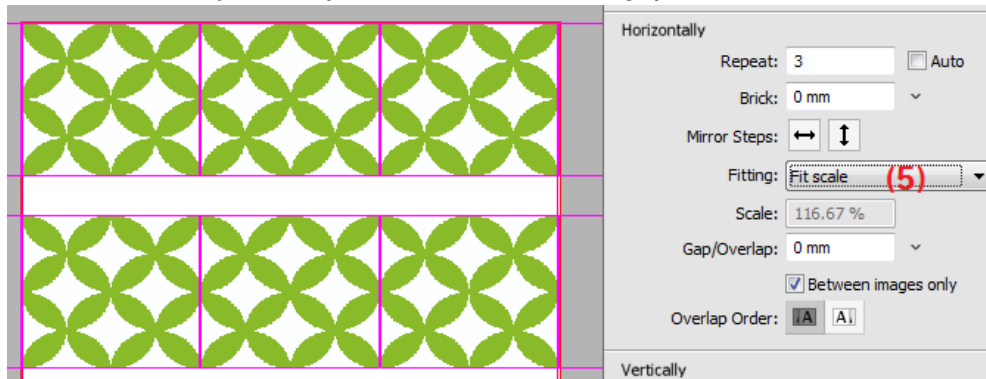

6. Enable "Auto" for the horizontal Repeat (6).
7. Select Fitting: "Clip partial" (7). The horizontal repeat value is automatically set to 4. Partial cells are clipped on the product size.
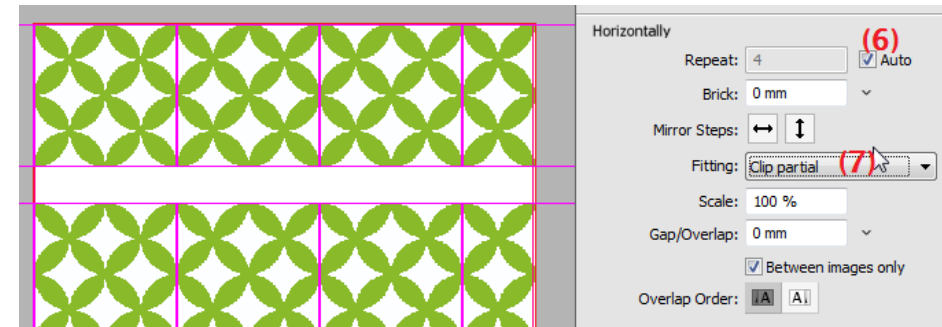
8. Change the product size width to 900 mm (8). The horizontal repeat is automatically set to 5. The 5th cell is now partially clipped (9).
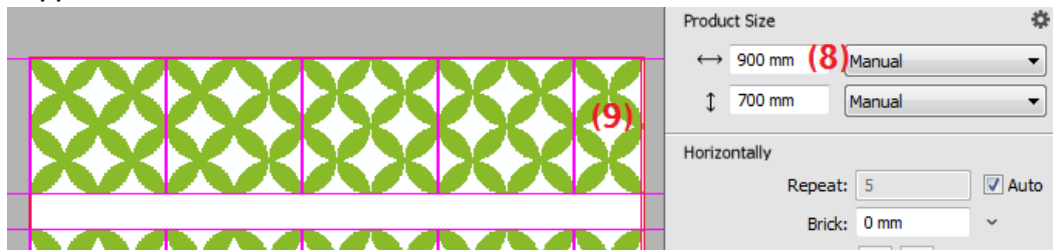
9. Click the cog wheel next to the Product size, select "From Media with margins" (10). This sets the product size to the media size minus the finishing margins: 990 x 690 mm.
10. Change vertical gap to 0 mm (11). The image is maximally repeated inside the Finishing margins. Partial cells are clipped.

11. Click Apply to return to Layout Editor.
12. Select menu Sheet > Rearrange Frames.
13. Submit the job > Make and Hold.
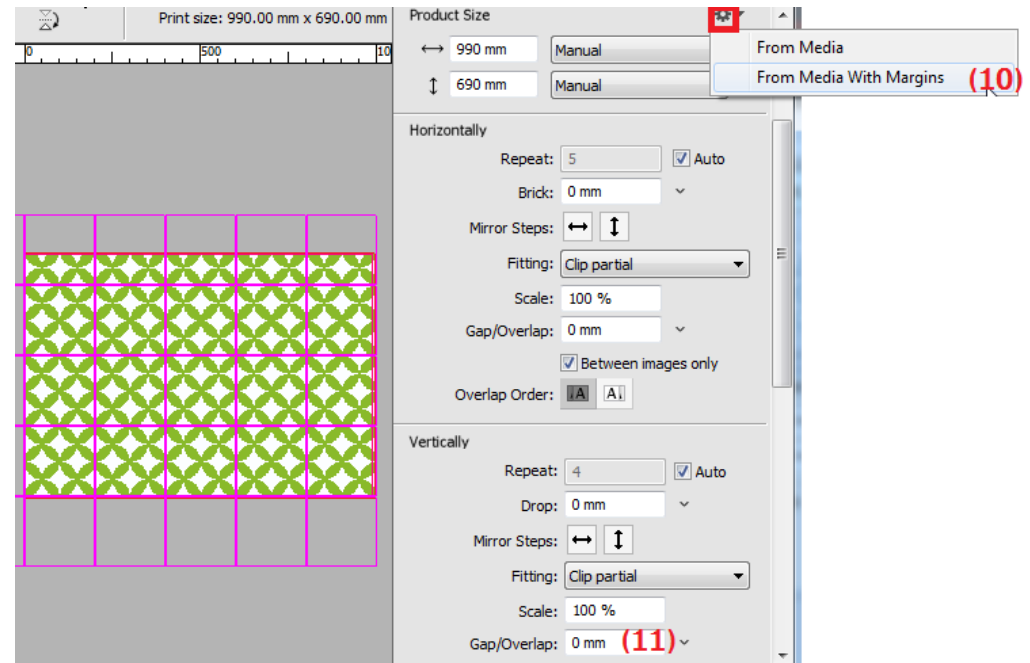
3. Use the Brick and drop settings

1. File>New Layout Job.
2. Select a printer.
3. If the printer is able to print on roll, enable "Print on roll" and set width to e.g. 1500 mm, otherwise set size to 1500 x 700 mm.
4. Open the Finishing inspector.
5. Set Finishing Margins to "From Edge 0, between 0".
6. Import image "Flowers 150x50mm.pdf".
7. Edit the image in Image Editor.
8. Enable Step & Repeat (make pattern).
9. Set horizontal repeat to 3 and vertical repeat to 10.
   Notice that the images do not seamlessly match up with each other. This is because the image was designed to shift in the pattern.
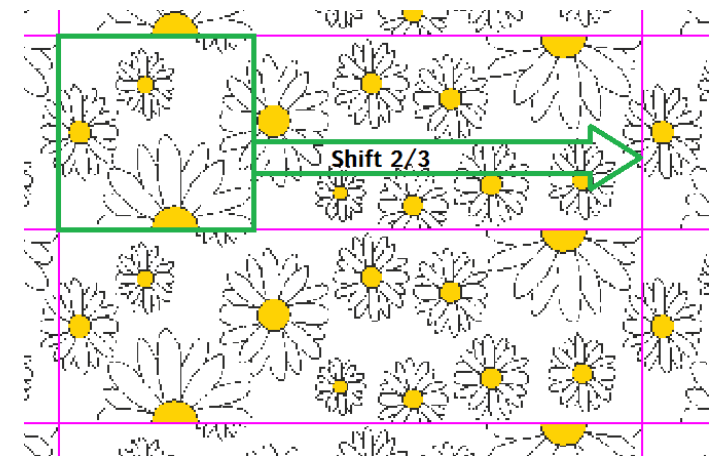
10. Next to the horizontal brick field, click the drop down and select "2/3". This shifts each row 2/3.
11. Click Apply to return to Layout Editor.
12. Drag the pattern to the sheet.
13. Submit the job > Make and Hold.
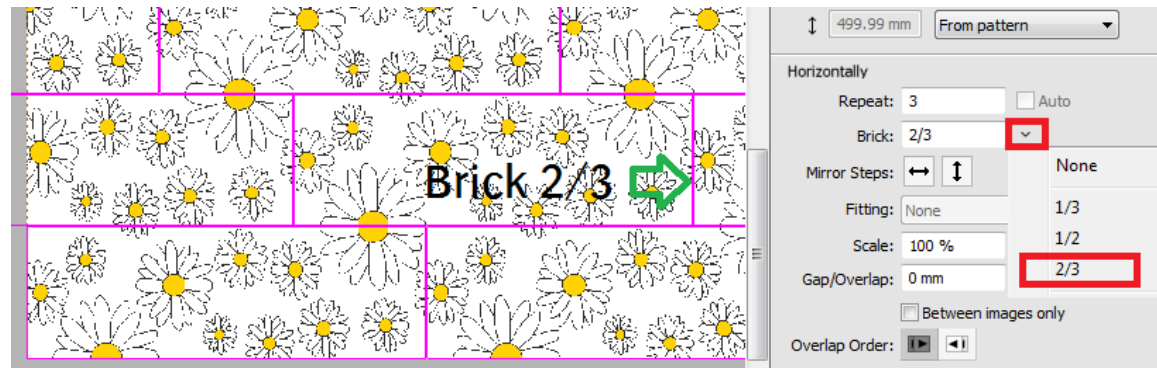
4. Use the minimal repeat option

1. Edit job "Flowers 150x50mm".
2. Edit the image in Image Editor.
3. Set Bleed to 0 mm.
4. Click the cog wheel next to the Product size, select "From media". The horizontal product size is set to the media width (1). When roll media is used, the vertical product size is set to "Minimal repeat" (2). With the minimal repeat option on, the product size is automatically calculated from the repeat count. The vertical repeat (3) is set to 3 because brick is set to 2/3. With brick 2/3, 3 cell rows are required to print seamlessly multiple copies on the printer (see screenshot next page). The product size height (4) is set to 150 mm.

Print copy 1

Print copy 2
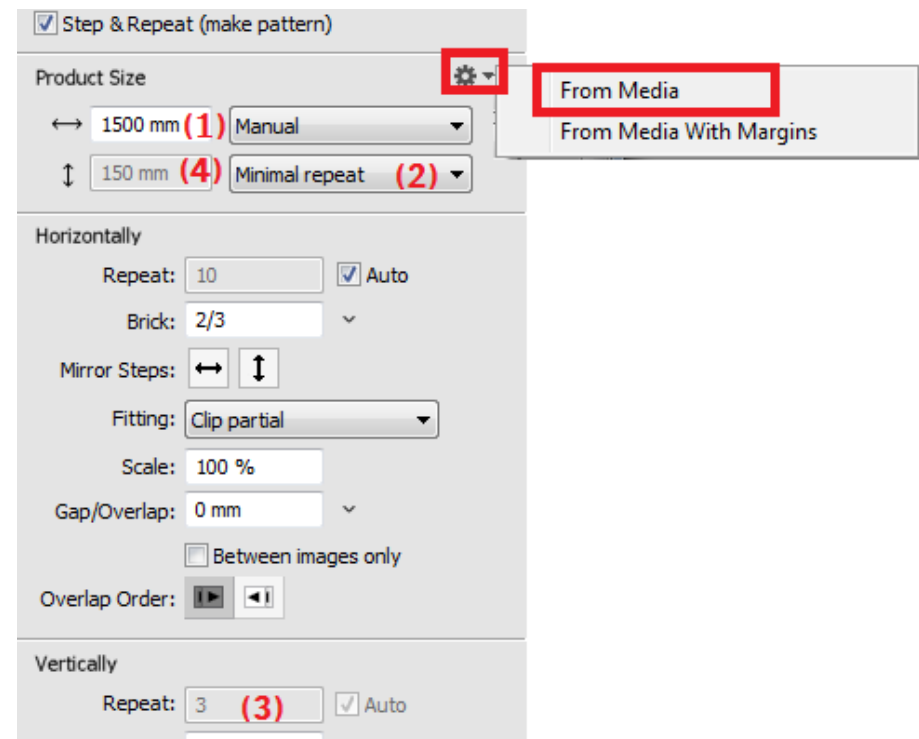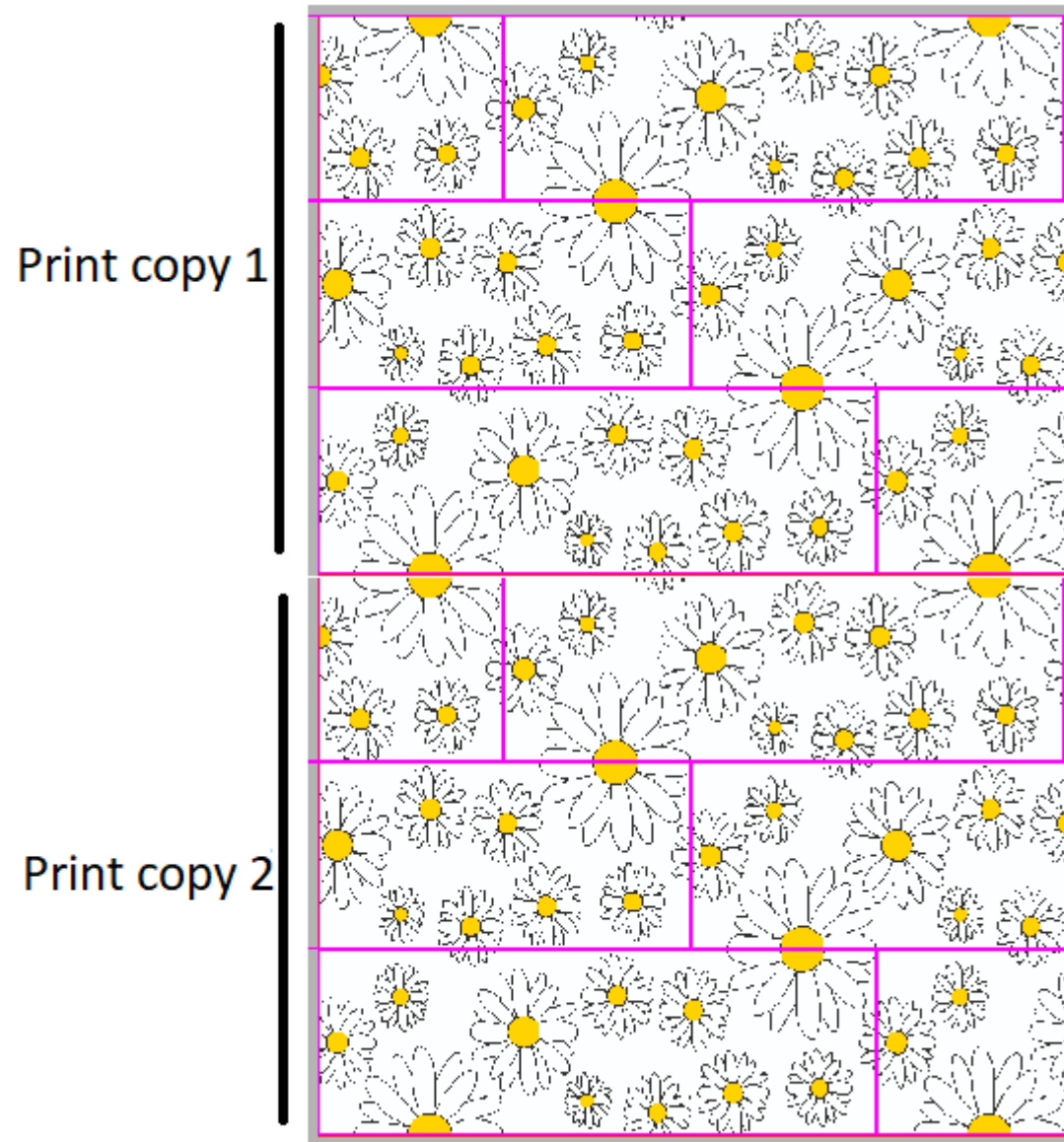
5. Change horizontal and vertical scale (5) to 200%. The vertical repeat is still 3 but now the product size height (6) is 300 mm.
6. Change the product size width (7) to 1460 mm to make the pattern little bit smaller than the media width.
7. Click Apply to return to Layout Editor.
8. Center the pattern horizontally on the sheet.
9. Align the pattern to the bottom of the sheet.
10. Submit the job > Make and Hold".
11. Continue the job to the printer.
12. When roll media is used and your printer can print copies of an image without a gap between the copies (e.g. Tauro), print the job with copy count of e.g. 5 x on roll media. The printed result will be a 1.5 m long seamless pattern.

5. Setup mirroring, orientation and offset

1. File>New Layout Job.
2. Select a printer.
3. Set Sheet Size to 1400 x 1400 mm.
4. Import image "FloorTile.pdf".
5. Edit the image in Image Editor.
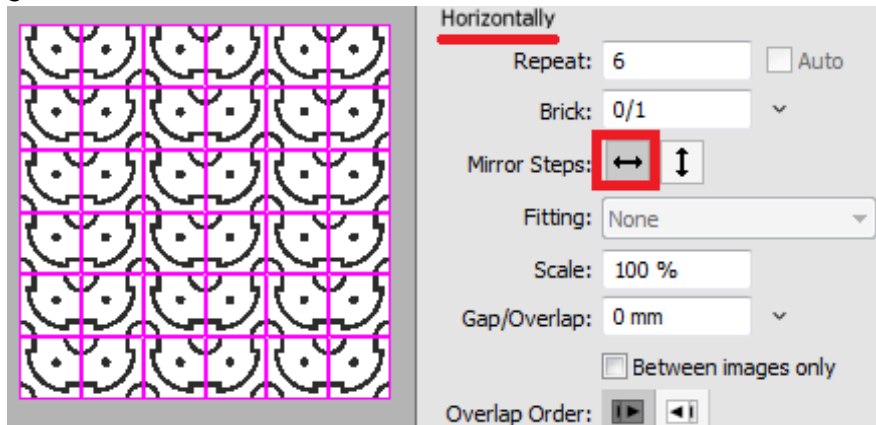6. Enable Step & Repeat (make pattern).
7. Set both horizontal and vertical repeat to 6.
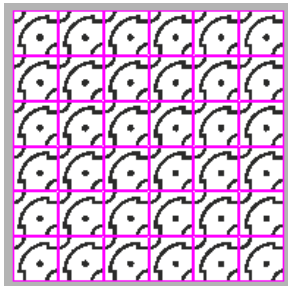
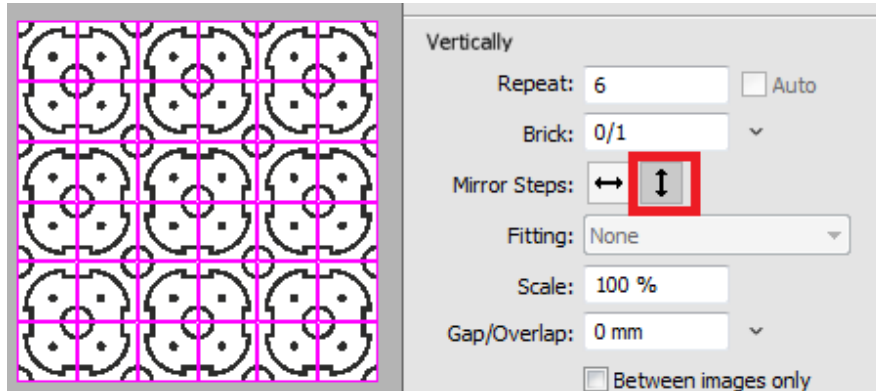8. In the Global section you can change the orientation of the first cell. Set first cell to 90 degrees
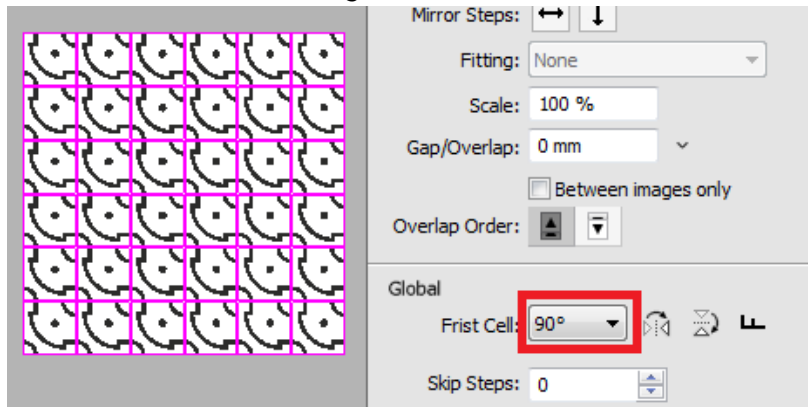
9. Click Horizontally>Mirror steps . All even numbered columns get a mirrored version.
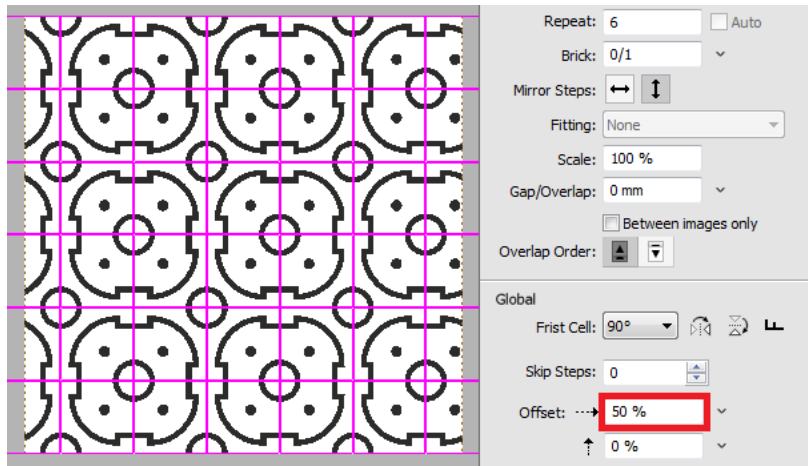
10. Click Vertically>Mirror steps ↕ . All even numbered rows get a mirrored version.

11. Enter 50% for horizontal Offset. The cells in the pattern are offset half a cell.

12. Click Apply to return to Layout Editor.
13. Drag the pattern to the sheet.
14. Submit the job > Make and Hold.

6. Issues/limitations

- Image DQS is switched off when a pattern is placed on the sheet.
- When cells overlap, the Image Editor and layout editor don't show a proper preview.
- Canvas extensions cannot be enabled for patterns.
- A pattern cannot contain more than 1 image.
- When a pattern is tiled, a wrong thumbnail is shown in the montage instructions.