

# Designing Deflected Double Weave for Two Layers

## Double Width Fabric with a Fold

### Using Adobe *Photoshop*

This method is for weaving deflected double weave (DDW) on an end end, light - dark warp.

All work is in Adobe *Photoshop*. I am grateful to Vibeke Vestby of [Digital Weaving Norway](#) for publishing her quick [method of making double width fabric](#).

This tutorial is based entirely on Vibeke's method and is for readers already experienced in using *Photoshop* for designing weaving files, making pattern presets and changing image sizes. The only difference is in the actual presets used.

The challenge addressed:-

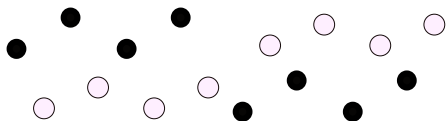
- the loom is threaded with an end end light dark alternate end warp, perfect for two end satins, double weaves, repp, turned taquete and many other weaves



- I want to weave a DDW four end light, four end dark design. Luckily The sett of the loom will suit a double layer of DDW.



Despite the colour order on the loom we use the green grid technique described below to rearrange the colours into two layers.



The fabric will be in two layers, each layer having four warp ends in one colour, followed by four in the other colour.

As in single layer DDW, there will be two wefts, a light and a dark.

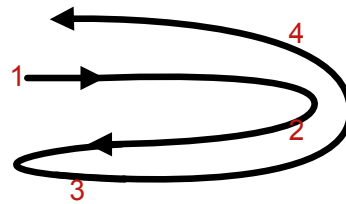
In the single layer version each weft weaves for four picks, followed by the other for four picks. In this two layer version each colour of weft weaves for eight picks, followed by the other for eight picks. The weave repeat is therefore 16 picks.

To reduce mistakes I always start my shuttle weaving sequence from left to right.

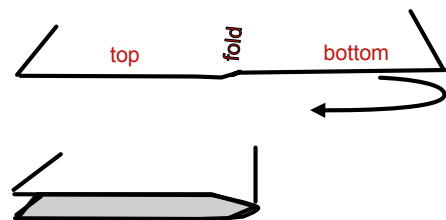
For double width fabric my shuttle will pass in the layers like this:

Picks:

1: top, 2: bottom 3: bottom 4:top.



This fold will be on the right. The right hand side of the design will be woven folded underneath

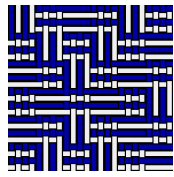
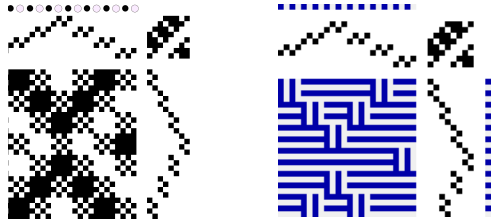


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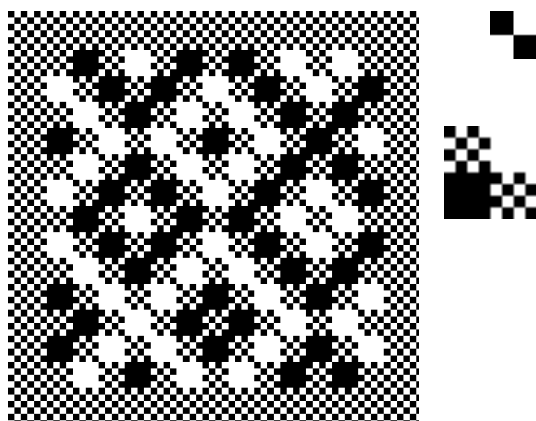
Start with a single layer deflected double weave design file. Here is an example of a single repeat.



Working with the drawdown only, make sure it is loom width, and divisible by 4 in width and height. Consider how the design fits in the width, and that it is balanced to the eye.

Make plain weave selvages on both edges. Adjust the width of these to make the design balance. I have used both 8 and 12 end selvages.

Use the same tabby as the tabby in the deflected double weave file. Be consistent in your choice of tabby. I used the version shown here, the same one as the DDW.



Be loyal to the tabby. If you switch to the opposite version for a different file. If you weave one after the other, the warp ends will switch position, and the cloth may annoyingly cut horizontally at that point

### Prepare two pattern presets to use as fills:

These presets are 16 x 4 pixels, with transparent backgrounds.

The grey looking / checkerboard grey squares in the grids **must** be transparent in Photoshop.

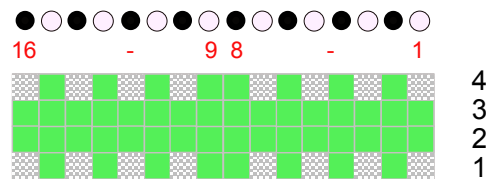
The loom is threaded light, dark, light, dark, counting everything from the right hand side.

The picks weave from bottom to top.

The top layer is woven with picks one and four.

The bottom layer is woven with picks two and three.

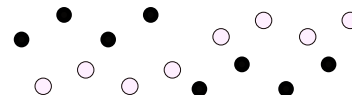
### Green grid preset



The green area will be filled with the weave for the lower layer.

The transparent squares will contain the weave for the top layer.

This reverses after eight ends, to make the desired light, dark sequence.



In the double width cloth, each layer is to have four light ends followed by four dark ends.

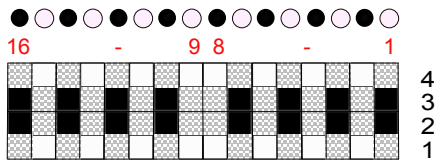
The grey squares on ends 1, 3, 5 and 7, are light, while the ends 10,12 14 and 16 are dark.

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#### Black-white point preset



The black-white points govern which layer will be on top.

When the shuttle weaves the top layer, picks one and two, the **white points push warps down**. Those warps will not weave in the top layer:

dark warps 2, 4, 6 and 8

light warps 9, 11, 13, 15.

The **black points** on picks two and three **raise warps** when the shuttle is weaving the bottom layer. Those warps will weave in the top layer:

The ends raised are:

light ends, 1, 3, 5, and 7,

dark ends 10, 12, 14 and 16.

This completes the separation into layers.

The grey squares which contain the weaves on the top and lower layers are not affected.

#### Step by step process

*Reverse lefts and rights here if you start your shuttle from the right.*

-Work on a duplicate copy of your design file.

-Flatten it. <sup>1\*</sup>

-Double it in width and height.

-Marquee select the right hand half.

-Flip this selection horizontally and invert it.

-Save this as a preset 'Bottom Layer'.<sup>\*2</sup>

-Crop away the right hand side (bottom layer) . Now the top (left hand side) layer remains at loom width, and twice as tall.<sup>3</sup>

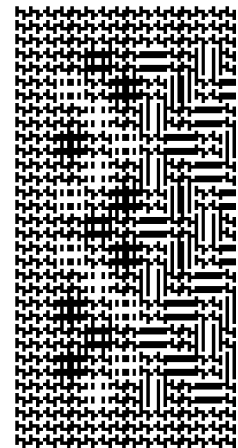
-Apply the green grid preset.

-Select the green pixels, fill with the 'Bottom Layer' preset.

-Deselect, fill with black-white point preset.

Your file will look very busy!

Now save it as a bitmap or tiff to weave.



#### Options:

A: fill the cropped file with a combined green grid and black - white point preset, then select the green points to fill with pattern fill 'bottom'.

B: adapt for DDW with other colour arrangement such as six light and two dark.

Find demonstration videos at [vimeo.com/belindarose](https://vimeo.com/belindarose)



<sup>1</sup> If you wish to retain the current view of the file for future use, save it now as a preset before proceeding.

<sup>2</sup> This half will become the layer folding underneath.

<sup>3</sup> the extra height makes the room for the second layer