

WeavePoint Complex Drafting

Tutorial with sample patterns

All sample patterns from "Handbok för version 7"

by Åsa Martinsson

Translated by B.T. Myhre

Introduction

To show the possibilities with Complex Drafting, various sample patterns are included. These sample patterns are installed in the subfolder "Samples for Complex Drafting".

The samples also illustrate different ways to make patterns. These are the ways I have developed while working with the software. With the samples where I describe the procedure for making the pattern, the final result is also included among the samples. To compare, you can open two program windows next to each other, one with the pattern you work on, the other with the final result. The final pattern sample includes all threadings, treadlings and tie-ups.

1. Note: In all sample patterns, a filled square in tie-up and liftplan = rising warp end.
2. You *can* use sinking shed, but then, in certain cases, you'll need to change point marks to sinking ends.
3. The sample patterns are not write protected. It is a good idea to make a copy of the samples folder before you start working with it.

In the samples collection, there are a number of patterns from Sweden that can be developed with different weaves: *Galler 1 (Lattice 1)*, *Galler 2*, *Plommon (Plums)*, *Blad (Leaf)*, *Ekenmark* and *Randmönster (Striped pattern)*. All are made so that one square equals one unit (découpure). With Transform|Expand Pattern, you decide how many ends and picks each unit will have. Pattern and weaves can be combined in different ways with File|Open Components.

To better see the interlacement of the threads, you can select Threads as Drawdown Style in Options.

In the sample patterns, I have chosen to start the threading from the right and to have shaft 1 at the top/treadle 1 at the right. These options are not saved in the files, so if you want to see the patterns as in the illustrations here, you should check that these options are selected.

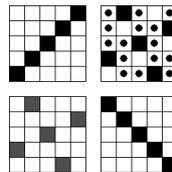
Each pattern has more than one colorway. You can switch colorways in Yarn|Edit Colors.

Damask



Do the following to construct the weave:

1. Open the file Galler2.
2. Select View|Draft before you expand the pattern, because Design mode is limited to 2400 ends and 2400 picks. Draft mode can have up to 4800 ends and 4800 picks.
3. With File|Save As, save the pattern with a new name.
4. Transform|Expand Pattern. Select 5 ends and 5 picks.
5. Options. Select Shafts A: 5 and Treadles A: 5
6. Draw the draft for 5-shaft satin.



Use:

Fill|Threading A|Straight

Fill|Treading A|Straight

To draw the dots, use Ctrl-click (press Ctrl-key, click with mouse).

7. The file *Damast 5 Galler 2* contains the final result.
8. Use Yarn|Edit Colors to see other colorways.

In *Damast 8 Galler2*, the same pattern uses 8-shaft satin as ground weave.

There are two different ways to display another pattern as damask with 5-shaft satin ground weave.

Open *Damast 5 Galler 2*.

File|Open Components. Doubleclick on *Plommon*. Check Pattern Threading and Liftplan. Leave all other options unchecked. OK.

Transform|Expand Pattern.
5 ends x 5 picks.

Remember to save with a new name (Save As..).

Open *Plommon*.

Transform|Expand Pattern.
5 ends x 5 picks.

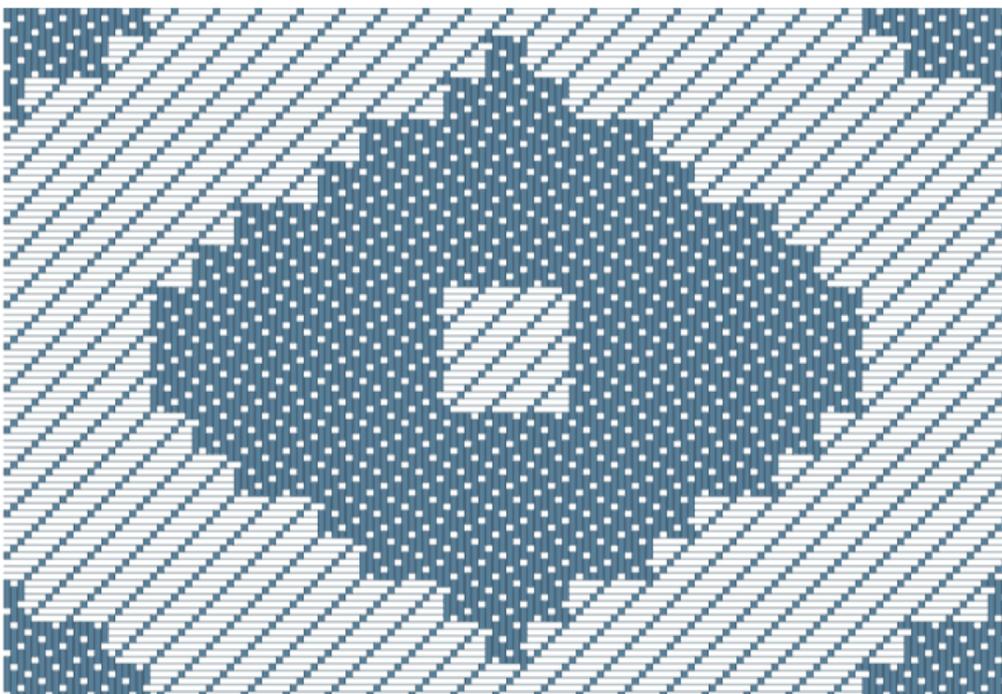
File|Open Components. Doubleclick on *Damast 5 Galler 2*. Check Threading A, Treadingling A and Tie-up AA. Leave all other options unchecked. OK.

Remember to save with a new name (Save As..).

Combining satin and twill

In traditional damask, warp satin is always combined with weft satin. However, you can also combine other weaves, like warp satin and weft-faced twill. The only limitation is that one end cannot both rise and sink in the same shed. This means you cannot combine any weaves. If you take a 5-shaft satin, you'll note that it cannot be combined with a twill diagonal.

In the sample file *Satin-Kypert Plommon (Satin-Twill Plums)*, I have combined a 6-shaft warp satin with a 6-shaft weft-faced twill.

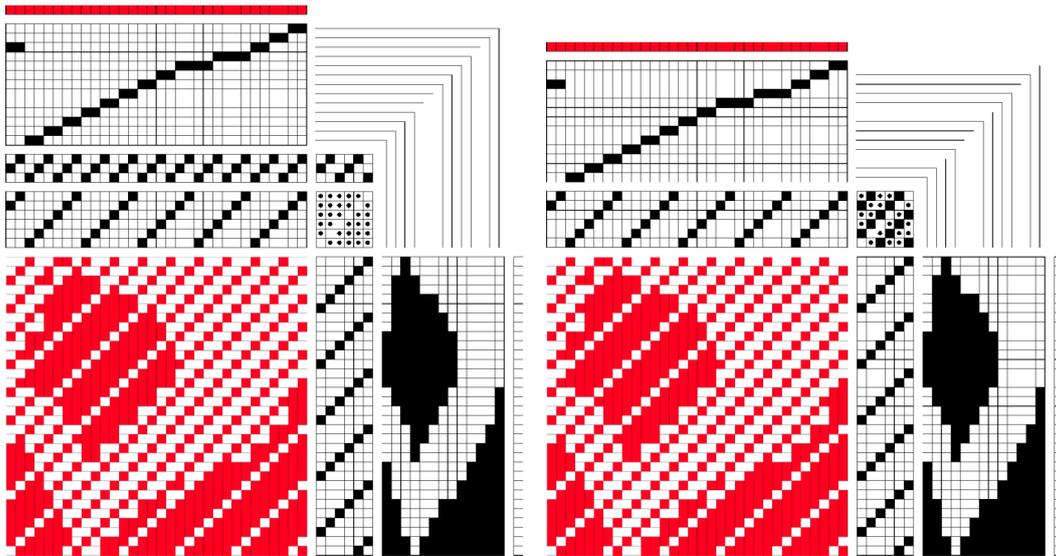


Ling

- Twill damask.

John Becker describes a damask which has a combination of 1/2 twill and 5/1 twill. According to Ulla Cyrus-Zetterström, this combination, with the diagonals in the same direction, was popular under the Tang dynasty in China. This traditional monochrome patterned silk is called Ling.

Becker explains how one can weave this, either with two groups of ground shafts, or only with one ground shaft group:



In the Complex Drafting samples folder, you can find *Ling Plommon*.

Florett

The sample patterns discussed so far, show how weaves with the same number of shafts can be combined. If the weaves have a different number of shafts, you can do like the ancient Chinese – use two ground shaft groups: One group for sinking ends and one for rising ends. Also here you must observe the rule that one end cannot rise and sink at the same time. If not, you will see that the structure comes out wrong – the program chooses one alternative and neglects the other. By shifting the threadings relatively (by removing ends in one of the ground threadings), you can see how the weaves must be placed to overlay correctly.

In the Berch collection in Nordiska Muséet in Sweden, there are samples of a fabric called 'florett'. Here a pattern in warp satin shows on a ground in a twill composition. These fabrics are not woven with main and ground shafts – the warp ends bind individually. They are probably woven on a drawloom containing about a little more than a hundred cords (fr. *métier à la petit tire*).

I used the 'florett' fabrics as a starting point for the sample pattern *Florett Blad*. In the Berch collection, the fabrics are woven in 5-shaft satin, but as this cannot be combined with a twill, I chose an 8-shaft satin and used a twill variation for the background.

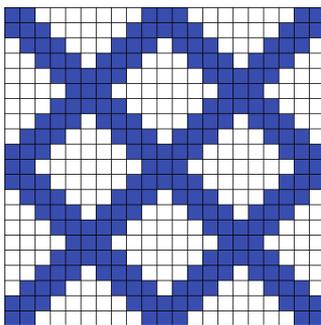


Lampas

Galler 1

In this sample, the main warp and binding warp are in the proportion of 3 to 1, which means three main warp ends and one binding end. One unit (*découpure*) has three main warp ends. Ground weft and pattern weft are in the proportion of 1 to 1. The main warp is bound in 3-shaft warp-faced twill and the binding warp in tabby.

Pattern



Weaves

Ground:

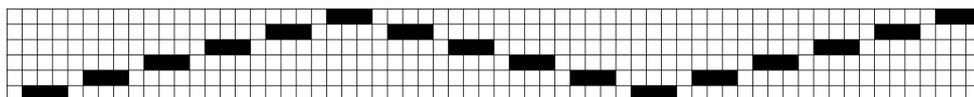


Pattern:



1. Open *Galler 1*. Each square in the pattern will in the pattern threading have three ends entered in one unit and one end that is only entered in the ground shafts. Vertically, one square equals two picks.

The pattern threading should look like this:



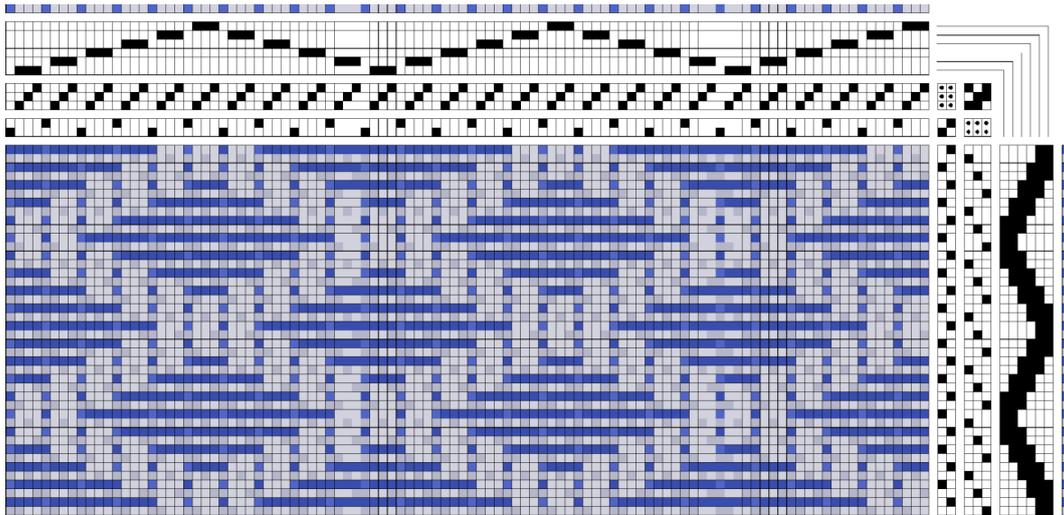
2. Transform|Expand Pattern: 3 ends and 2 picks.
3. To add the binding warp end which is not entered in the pattern shafts, select Transform|Insert in Pattern Threading. Interval 3 and check After Interval.
4. Select number of ground shafts in Options: 3 shafts A, 3 treadles A, 2 shafts B and 2 treadles B.
5. Fill|Tie-up AB, Pointmarks – BA, Pointmarks.
6. Fill in threading/treadling A for the ground weave and threading/treadling B for the binding warp and pattern weft (see image below).
7. Add colors to warp and weft:

Warp - Ground warp: 3 gray (index 2), Binding thread: 1 dark blue, (index 3).

Weft - Ground weft: 1 light gray (index 0), Pattern weft: 1 blue (index 1).

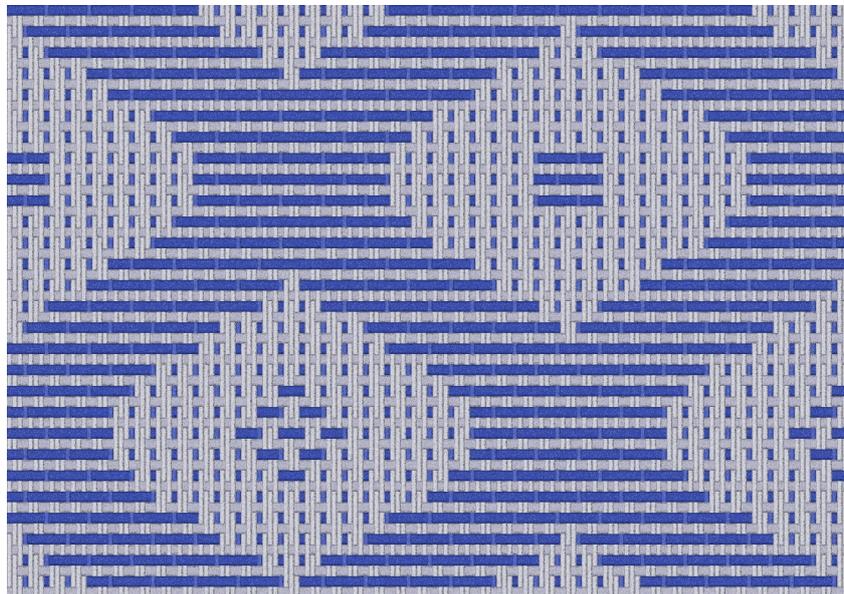
See illustration on next page.

The final result in *Lampas Galler 1*:



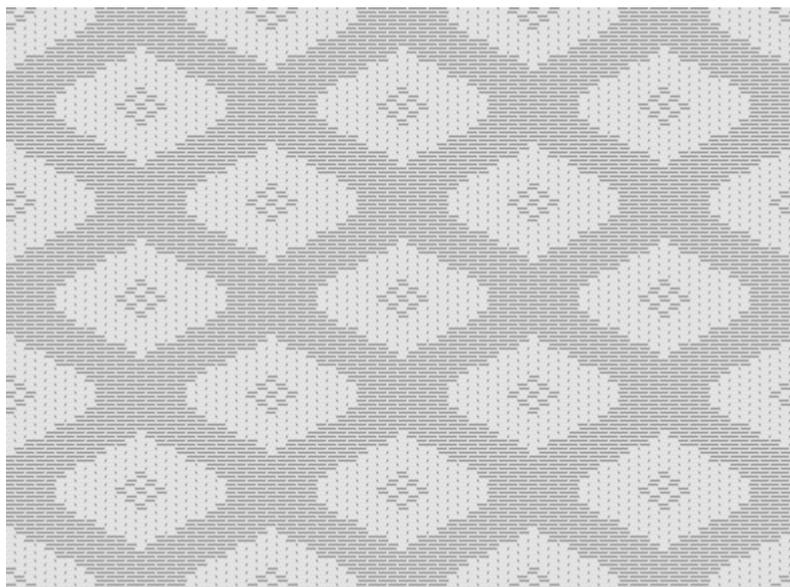
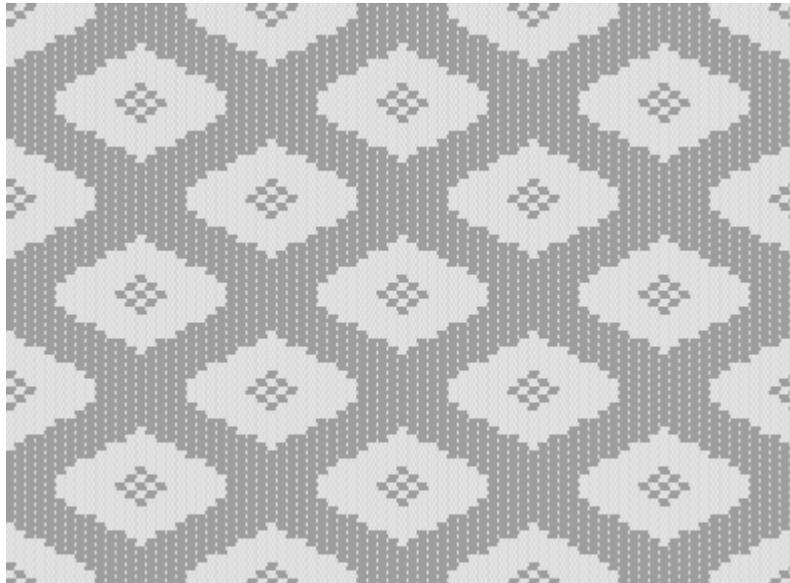
The ground is gray with blue pattern. Warp and weft have a small difference in value, to make the structure visible. The weft is more open than the warp. Use the command View/Fabric to see the pattern in the right warp/weft proportion.

Lampas Plommon shows the Lampas structure with a different pattern. Here the ground weave makes the pattern.



Beiderwand

Beiderwand is a special variation of lampas. It always has four main warp ends to one binding warp end. Tabby is used both for main weave and for binding weave.



The sample pattern *Beiderwand Plommon* shown as Fabric with/without fabric compression (you can select this in Options). With this, in combination with a suitable choice of warp and weft density (also in Options), you can get a more or less realistic view of the final fabric.

Compression packs two weft rows into one visible row. You may influence the result in this case by inserting or deleting the first pick in the liftplan or treading. If one weft forms the main pattern, this should be placed on even numbered picks..

Qi

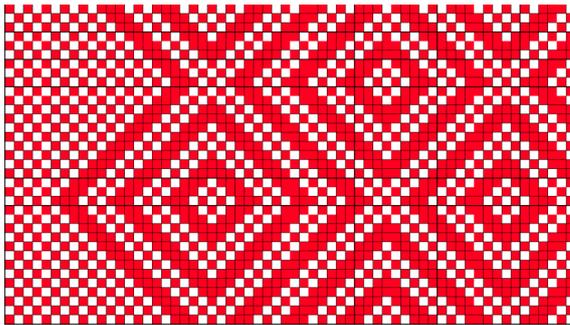
According to Ulla Cyrus-Zetterström, qi was monochrome patterned silk. The term 'qi' is found in old Chinese texts, but is not used for modern textiles. Qi is not a special weaving method. The structure is normally warp floats on tabby ground. The floats pass mostly over three to five threads directly or in intervals, and form small or large geometrical patterns.

John Becker analyzes several such fabrics, most of which are patterned by warp-faced twill on tabby ground. His fabrics are not woven on a drawloom, but it works well to draw them like this. The following samples are from Becker.

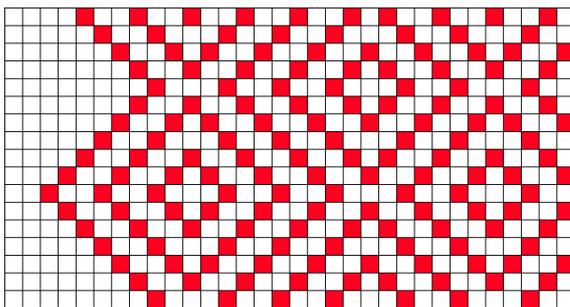
The three qi samples are drawn with similar colors in warp and weft, to obtain an impression of monochrome fabrics. To make the weave and pattern more visible, you can change colors in Yarn|Edit Colors.

Qi 1

To make it easy to compare with Becker's drafts, I show the same sections of patterns and weaves like he does in the book.

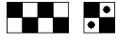


The drawdown as drawn by Becker.



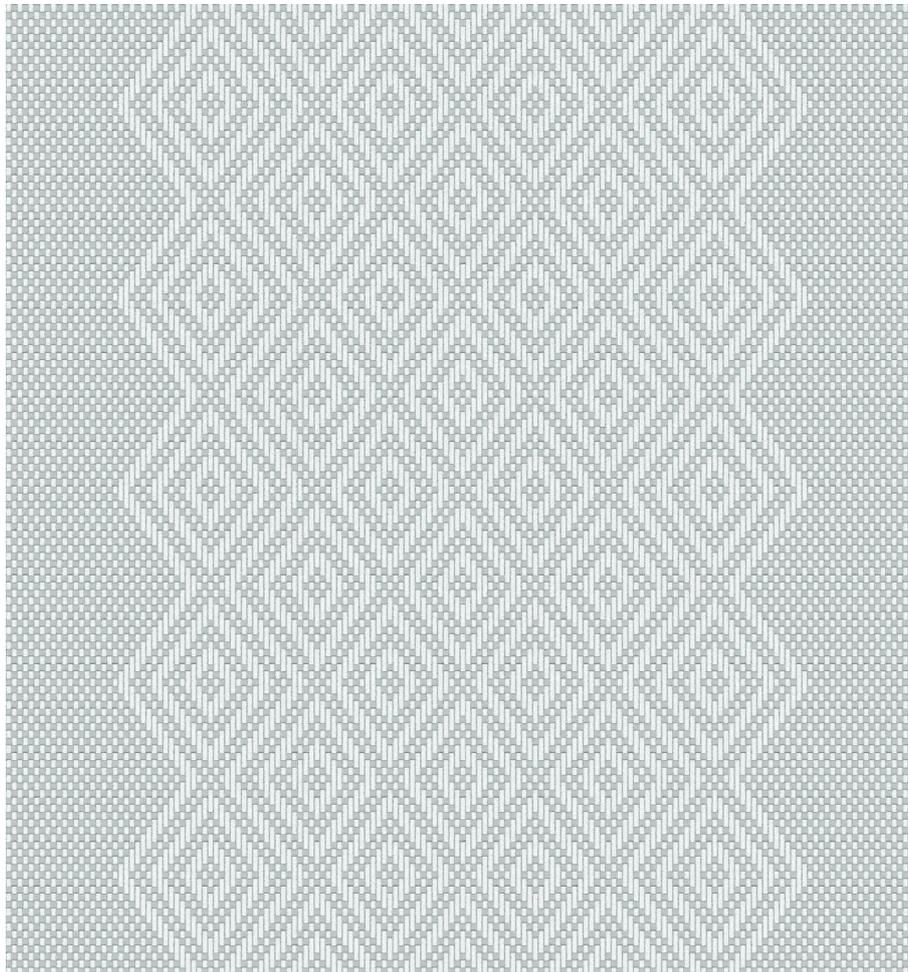
A pattern, to be developed into a full weave structure, can be represented like this.

1. Open *Qi 1 mönster (Qi 1 pattern)*.
2. Work in View|Draft mode.
3. Transform|Expand Pattern: 2 ends and 2 picks.
4. Select number of ground shafts in Options: 2 shafts A and 2 treadles A, deselect Threading B and Treadling B.
5. Draw the tabby.



Note: The tabby must start as drawn here.

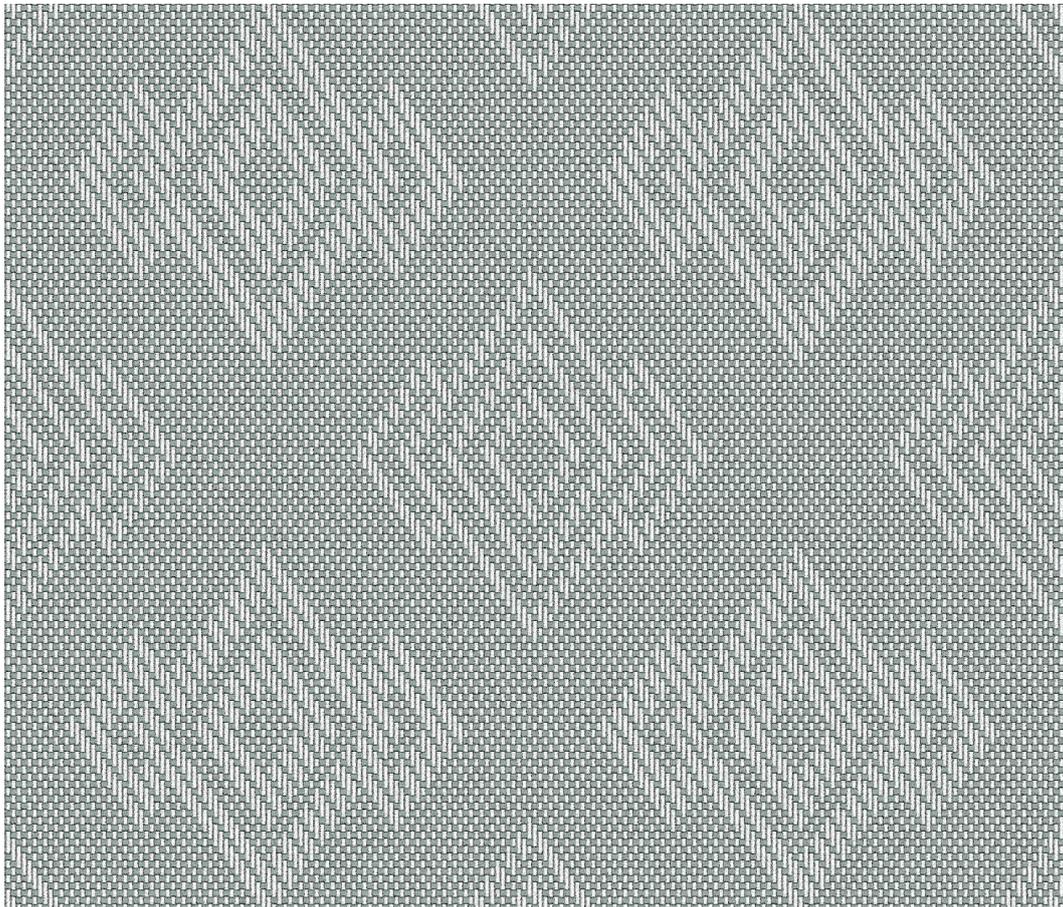
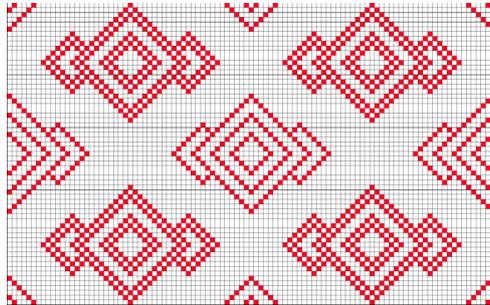
6. To change the direction of the twill diagonals, one can add or delete an end in the pattern threading at the turning points, and likewise in the liftplan. In this sample, there are one end and three picks at each turn.
7. Open *Qi 1 helt tyg (Qi 1 complete fabric)* and select View|Fabric to see the final result.



8. In WeavePoint Standard version, you can find View|Fabric with more yarn options and improved fabric simulation. To view a pattern from Complex Drafting this way, you can export the fabric as a PNG-image and as wpo-file (to import the colors), then open this in WeavePoint Standard.

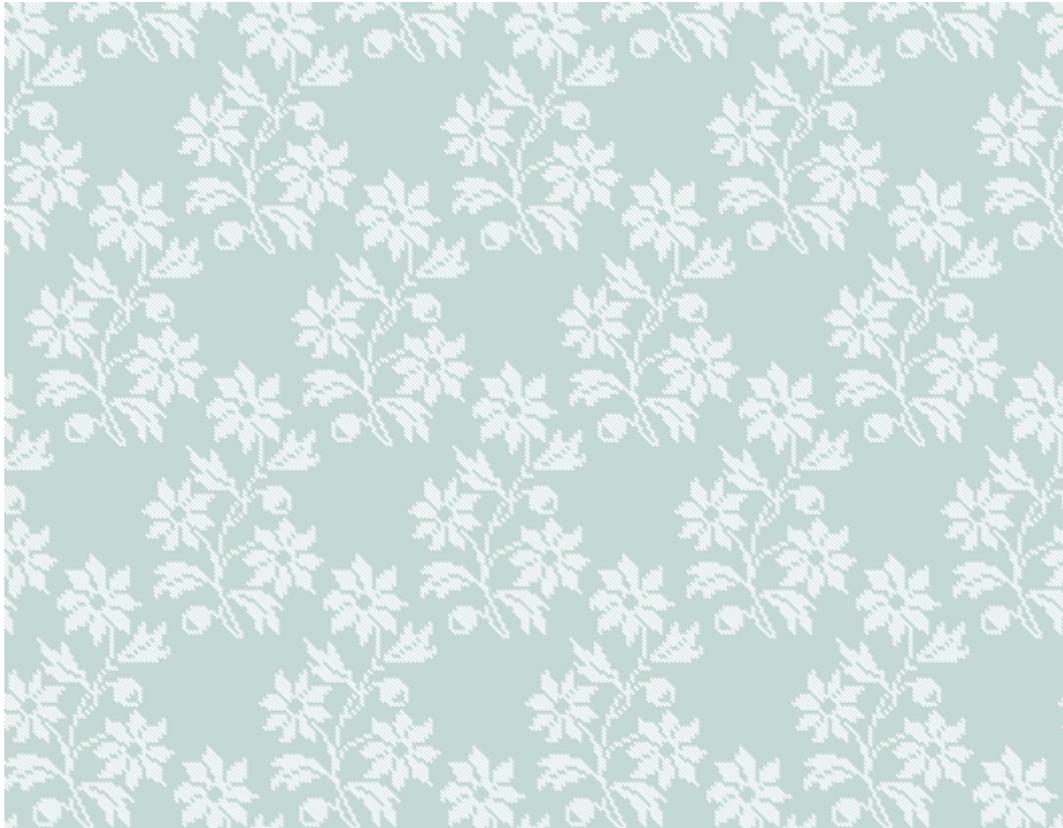
Qi 2

In the sample *Qi 1* above, the twill diagonals follow the outline of the pattern. In *Qi 2*, the units are 2 ends x 2 picks throughout, and an asymmetric effect will arise in an otherwise symmetrical pattern.



Qi 3

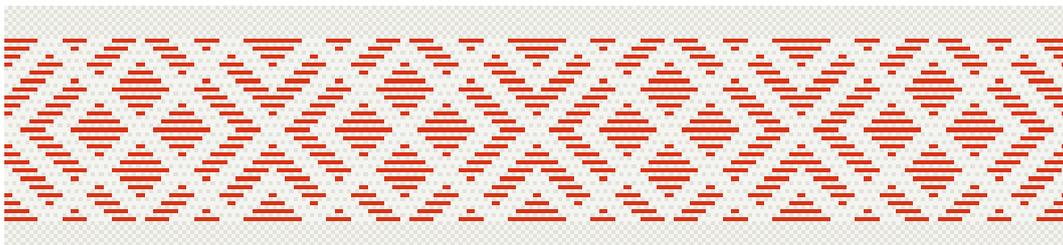
In C.F. Liljevalck's fabric collection, there are several silk fabrics from the 19th century using the old qi style. Patterns are now applied more freely. Here I have used a flower motif from Ekenmark's book of weaving for a qi fabric.



Upphämta

Upphämta på tvären

Upphämta på tvären (*Upphamta with weft floats*) is based on *Randmönster* (*Striped pattern*) with unit size 2 x 2. Try displaying the fabric with View|Fabric with both fabric compression set on and off in Options. In Yarn|Edit Colors, click on a different colorway to see the difference between light and dark ground. 'Upphamta' is a Swedish term, sometimes also written 'Opphamta'.



Upphämta på längden

Upphämta på längden (*Upphamta with warp floats*) has pattern ends that are only entered in the pattern threading. Note that the pattern ends will cover the tabby in the real fabric.