Mammen-inspired diagonals with inset diamonds

Simplified motifs from tenth century Denmark
woven by warp twining with optional surface weft decoration

Description

The pattern on this band is a much simplified version of the main motifs on the wide brocaded band from Mammen (Denmark, 10th century). The original was brocaded and there is debate as to whether the ground weave was a two-hole weave or used two light, two dark threads with the light threads having been vegetable fibre[1], now decayed. This version is woven using two light, two dark threads (Figure 1). The pattern is produced in a similar manner to the Finnish SZ pattern from Kekomäki cemetery, Kaukola (approx 1200 AD). The motif is also similar to a reconstruction of a fragment from 10th - 12th century Ladoga, Russia, then a trading settlement founded by Vikings.

Figure 1: sample woven in two-ply Silver Viscount machine knitting wool.

The band may be further embellished with surface weft decoration on the centres of the diamonds by wrapping a contrasting extra weft thread around the warp threads during the weaving process (Figure 2). This type of weft decoration is known as soumak, and the method is explained in detail later in this document. Alternatively you can embroider the finished band.

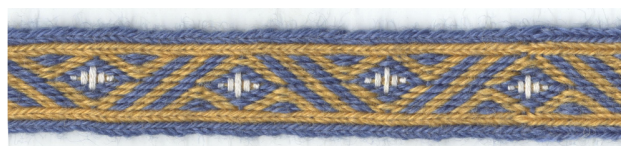1   Vegetable fibres may have been flax, nettle or other plant material.

Figure 2: soumak decoration of 60/2 white silk.

Difficulty	Easy (basic band) Medium (adding soumak decoration)
Authenticity	**B** Modern design using period techniques and simplified period motifs. Suitable for Viking re-enactment, medium status.
Number of pattern tablets	8
Number of border tablets	8
Weaving technique	Threading two light, two dark. Diagonal motifs created by individual turning of tablets. Optional surface weft decoration.

References

Hald, Margrethe. *Ancient Danish Textiles from Bogs and Burials: A Comparative Study of Costume and Iron Age Textiles*, trans. Jean Olsen. Archaeological-Historical Series Vol. XXI. Copenhagen: The National Museum of Denmark, 1980.

Hansen, Egon H. *Tablet Weaving: History, Techniques, Colours, Patterns*. Hovedland 1990.

С. И. Кочкуркина, О. В. Орфинская. ПРИЛАДОЖСКАЯ КУРГАННАЯ КУЛЬТУРА:

ТЕХНОЛОГИЧЕСКОЕ ИССЛЕДОВАНИЕ ТЕКСТИЛЯ. Available on academia.edu, http://tinyurl.com/mxn9sqq, 2014.

Schwindt, Theodor. *Tietoja Karjalan rautakaudesta*. 1892. Drawing 376. Reprinted 2012.

Threading

Pattern tablets

Eight pattern tablets, each threaded with two yellow threads and two blue, arranged yellow / yellow / blue / blue. It doesn't matter how the tablets lie when you thread up, so long as the two blue threads are next to each other. You will arrange the tablets correctly in the next step.

Pattern tablets are numbered 1-8.

Border tablets

Four border tablets on each side. Each of the outer two border tablets is threaded with four blue threads. Each of the inner two border tablets is threaded with four yellow threads. Orient the border tablets alternately, S Z S Z.[2]

Border tablets are not numbered because they are not manipulated in the pattern, and you may design any border you like.
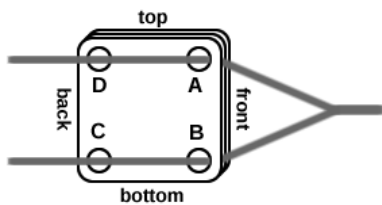

Figure 3: labelling the positions.

A, B, C, D show the positions of the threads in the threading diagram. Most weavers do not label their tablets because which hole is "A" changes as you turn them.
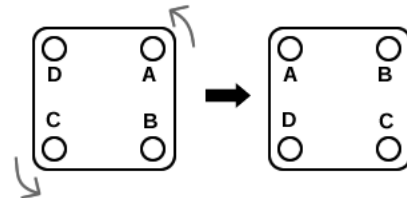

Figure 4: turning the tablets forwards.

If you work with the woven band on your side of the tablets, push the top of the tablets away from you with your thumbs.
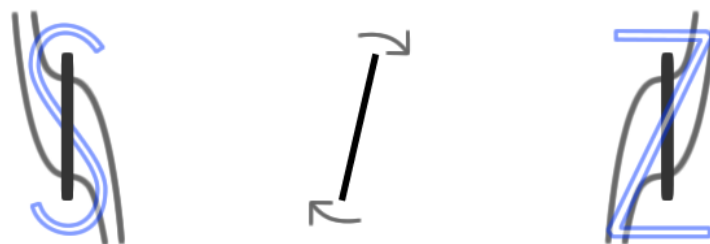

Figure 5: flipping a tablet to change it from S to Z (top view).

2   Orientation refers to the direction the threads pass through the tablets (Figure 5).

Weaving the basic band

After you've threaded the tablets, arrange them to match Position 1 in Figure 6:

1. Flip tablets as necessary so that tablets are all S-threaded.

2. Turn tablets as necessary until the threads are in the correct places, for example tablet 1 should have the two blue threads along the bottom edge.

3. Weave 7 picks[3], turning all tablets forwards: the tablets should now be in Position 2.

4. Continue with the instructions for each step in the diagram, always turning all tablets forwards. Where indicated in the instructions, flip certain tablets to change their orientation[4].

Figure 6 shows the position of the tablets at the start of each step, so you can check you are at the right place.

After you have completed Step 7, the tablets should be in Position 1 and you can start again at the bottom of the diagram.

When the border warp threads become tightly twisted, flip the outer pairs of border tablets. On the next pick, flip the inner pairs of border tablets. This will reverse the twining and undo the twist.

Troubleshooting

If you are having difficulty getting the pattern to work, first check that your tablets are correctly oriented, see Figure 5, and then check that your ABCD is the same way round as shown in Figure 4.

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3   One "pick" is a single unit of weaving, that is turn the tablets, clear and beat the shed, tighten and then pass the weft.
4   The numbers in the diagram refer to pattern tablets. For example "Flip tablets 1-4" means "Flip the first through fourth pattern tablets".

Tablets in position 7
1. Flip tablets 5-8.

Tablets in position 6
1. Flip all tablets
2. Weave 5 picks

Tablets in position 5
1. Flip tablets 5-8
2. Weave 5 picks

Tablets in position 4
1. Flip tablets 1-4
2. Weave 7 picks

Tablets in position 3
1. Flip all tablets
2. Weave 5 picks

Tablets in position 2
1. Flip tablets 1-4
2. Weave 5 picks

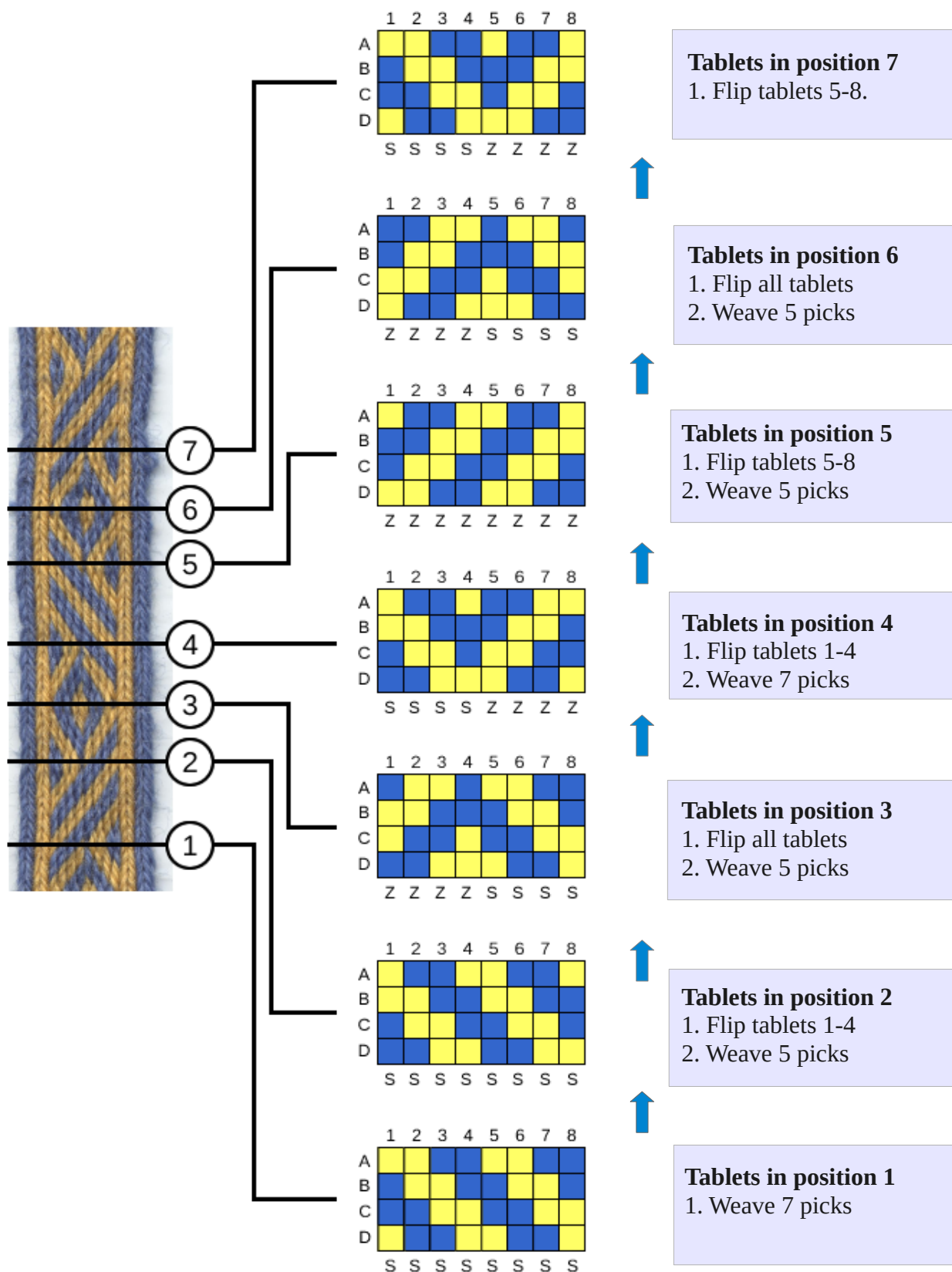**Tablets in position 1**
1. Weave 7 picks

Figure 6: weaving instructions.

*Start at the **bottom of the diagram** and work upwards following the steps in turn.*

Adding surface weft decoration (soumak)

Soumak is effectively embroidering your band as you go, by wrapping the warp threads with an additional decorative weft. It is a simple idea but exacting to do and I suggest that you only try this if you are familiar with weaving the basic pattern. You can alternatively embroider the finished band, which will look similar – see Figure 7 and Figure 8.

For your decorative weft, choose a valuable thread that will show up well. Gold, silver, silk or a richly dyed wool are all good choices. Wind your decorative thread onto a separate shuttle.
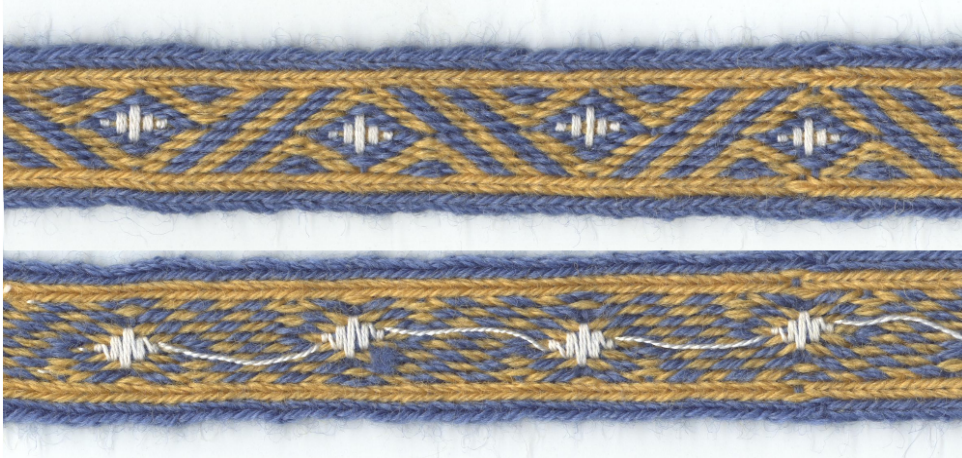

Figure 7: soumak decoration of 60/2 silk, front and back of band.

Because the soumak thread is so fine, it was

carried across each set of warp threads three times.

Figure 8: embroidered decoration.

Although the effect is similar, soumak is neater because the

decorative threads exactly match the pattern.

Start weaving the pattern as usual, with the tablets in position 1. The soumak is applied as an extra set of actions that do not affect the basic weaving method. The following instructions explain the steps to add the soumak. Figure 9 and Figure 10 show how the steps match up to the tablets and the woven band.

First soumak motif

Position 1
Weave 7 picks.

Position 2
Flip tablets 1-4.
Weave 3 picks, passing the weft as usual after each pick.

Position 2a
Pass the soumak thread up between tablets 3 and 4, leaving about 10cm of thread hanging below the band. When the band is finished, sew this into the back of the band and cut it off short.
Pass the soumak thread over tablet 4 and down between tablets 4 and 5.[5]
Beat again and gently tighten the soumak thread, but do not over-tighten as this will pull the motif inwards.
Weave 1 pick and pass the main weft.

Position 2b
Pass the soumak thread up between tablets 2 and 3, over tablets 3-5, and down between tablets 5 and 6, repeating if necessary to get good coverage.
Weave 1 pick and pass the main weft.

Position 3
Pass the soumak thread over tablets 2-6.
Flip all tablets.
Weave 1 pick and pass the main weft.

Position 3a
Pass the soumak thread over tablets 3-5.
Weave 1 pick and pass the main weft.

Position 3b
Pass the soumak thread over tablet 4 and leave the weft shuttle hanging down from the back of the band.
Weave 3 picks.

Position 4
Flip tablets 1-4
Weave 7 picks

5 You may find that to get good coverage, you need to pass the soumak thread up between tablets 3 and 4, and down between 4 and 5 again so that the warp threads for tablet 4 are completely wrapped by the soumak thread.

Second soumak motif

Position 5
Flip tablets 5-8.
Weave 3 picks, passing the weft as usual after each pick.

Position 5a
Pass the soumak thread up between tablets 4 and 5, over tablet 5 and then down between tablets 5 and 6. There will be a section of soumak thread at the back between the two motifs.
Beat again and gently tighten the soumak thread.
Weave 1 pick and pass the main weft.

Position 5b
Wrap the soumak thread around tablets 4-6.
Weave 1 pick and pass the main weft.

Position 6
Wrap the soumak thread around tablets 3-7.
Flip all tablets.
Weave 1 pick and pass the main weft.

Position 6a
Wrap the soumak thread around tablets 4-6.
Weave 1 pick and pass the main weft.

Position 6b
Wrap tablet 5.
Weave 3 picks.

Position 7
Flip tablets 5-8.

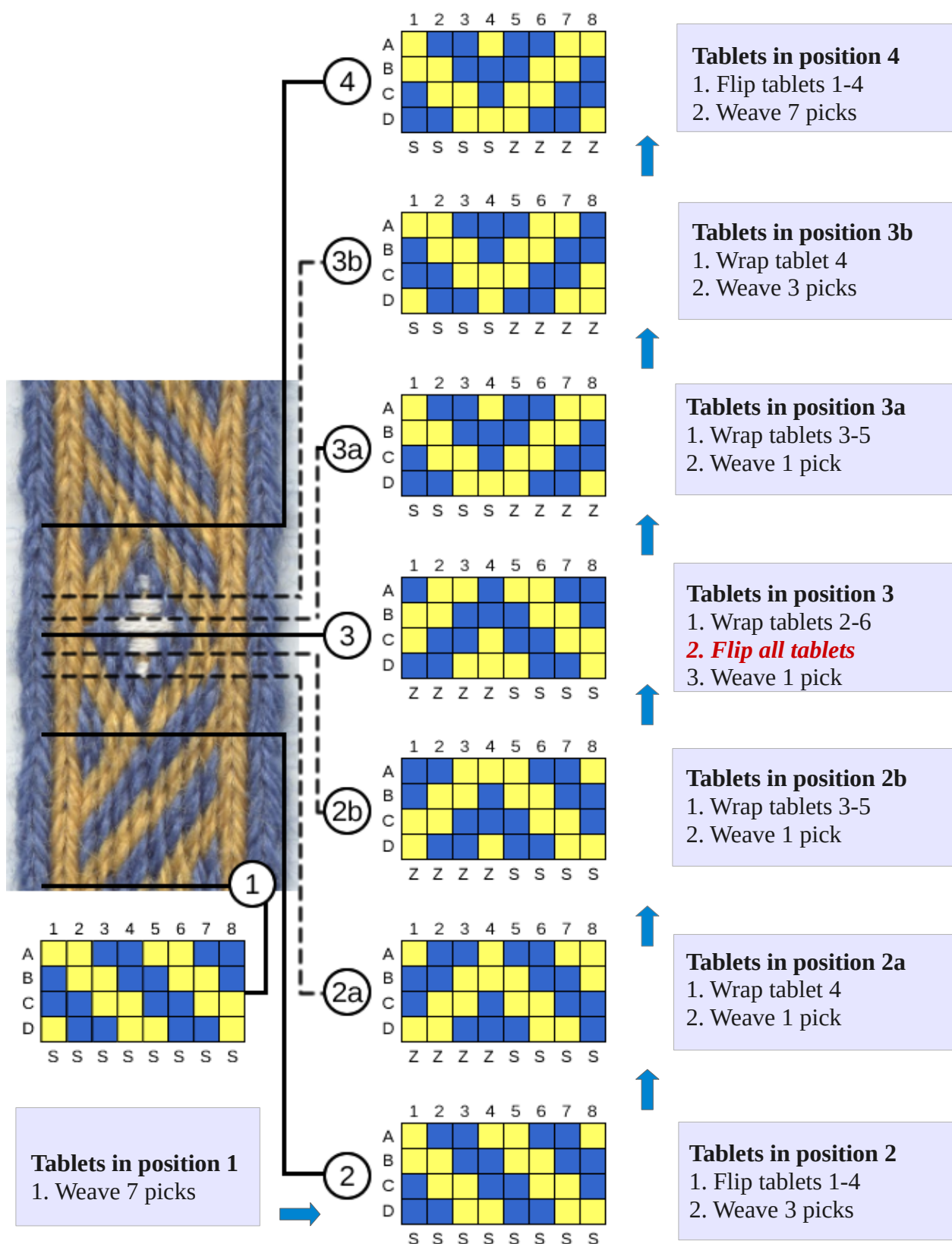**Figure 9: weaving the first soumak motif.**

*Start at the **bottom of the diagram** and work upwards following the steps in turn.*

Tablets in position 4
1. Flip tablets 1-4
2. Weave 7 picks

Tablets in position 3b
1. Wrap tablet 4
2. Weave 3 picks

Tablets in position 3a
1. Wrap tablets 3-5
2. Weave 1 pick

Tablets in position 3
1. Wrap tablets 2-6
2. *Flip all tablets*
3. Weave 1 pick

Tablets in position 2b
1. Wrap tablets 3-5
2. Weave 1 pick

Tablets in position 2a
1. Wrap tablet 4
2. Weave 1 pick

Tablets in position 1
1. Weave 7 picks

Tablets in position 2
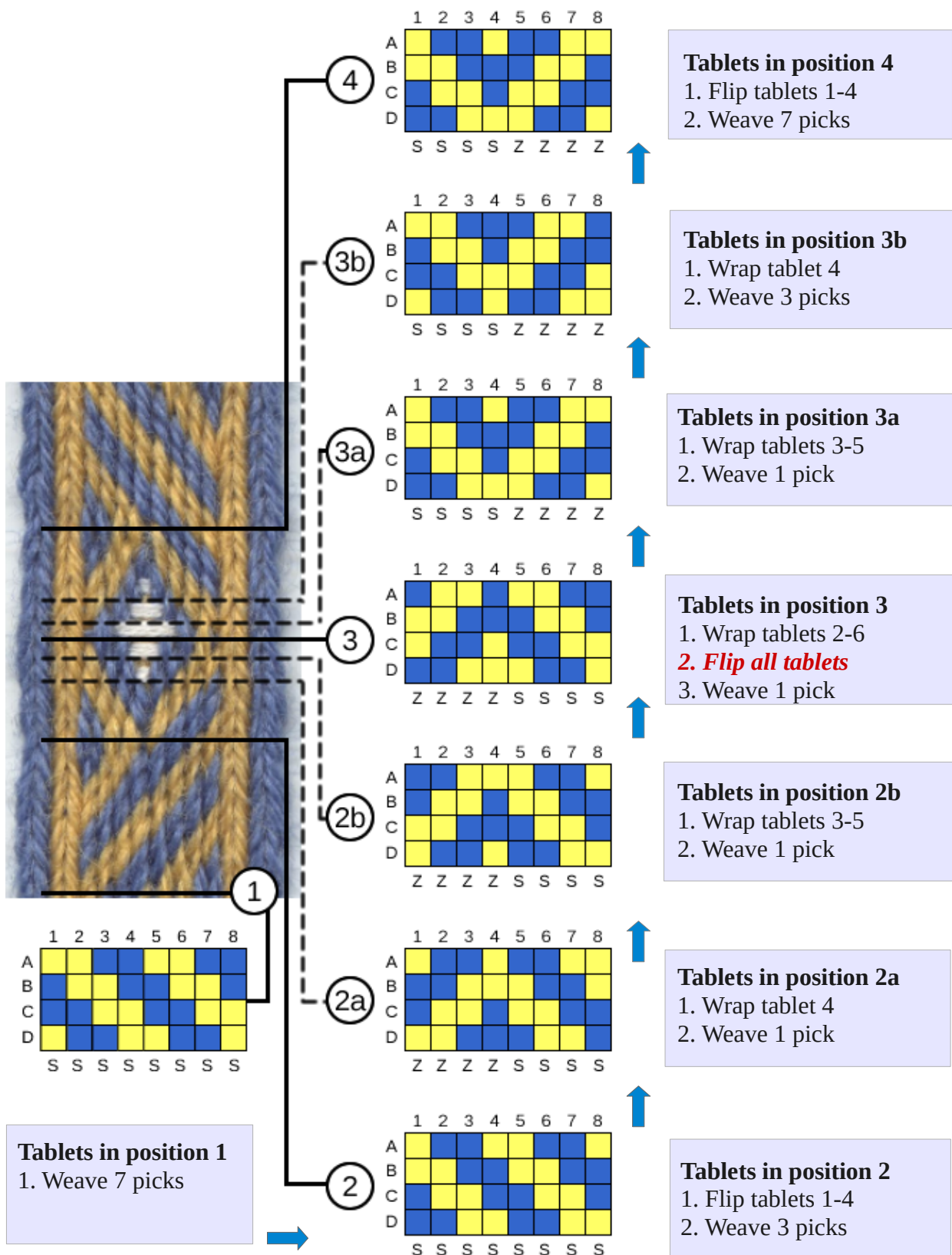1. Flip tablets 1-4
2. Weave 3 picks

Figure 10: weaving the second soumak motif.

*Start at the **bottom of the diagram** and work upwards following the steps in turn.*