

Unit Weaves and Profile Drafts

Part of the confusion is that we seem to have forgotten where we are:

Simple weaves	Plain Weave
	Float Weaves: Twills
	Float Weave: Satins
	Rectangular Float Weaves (ex. lacey weaves)
Compound Weaves with Supplementary sets	Supplementary weft weaves (ex. Overshot)
We are here: →→→→→→→→→→	Supplementary patterning weaves – unit weaves

The **first purpose** of this challenge was to understand unit weaves and their nomenclature. The nomenclature cannot easily be applied to other weaves.

Unit weaves form blocks, but “block” is a general term that can be applied to many of the structures, especially with more shafts: you can have blocks of twills, satins, float weaves, and supplementary weft weaves, plus others, like double weave which we haven’t studied yet.

There are hybrids, but I think it is best to start from the basics; if we understand the basics, we can then understand why a certain structure doesn’t fit neatly into one subdivision or the other. But, first and foremost, they fit nicely into Emory’s classification.

The **second purpose** was to be able to translate a profile draft to a threading draft. Let’s not overthink this, we all live with abbreviations and that’s what a profile draft is. If in an email I say “BTW” you know I mean “by the way”, I am just reducing 10 characters (including spaces) to 3. A profile draft is like that.

For this profile draft A BB C DD C BB (and repeat in a cloth), we plug in the threading for block A, 2 repeats for block B, etc. This is what makes the profile drafts so perfect for unit weaves: there is no ambiguity.

The challenge – and **third purpose** – was supposed to be how many unit weaves can we actually have with 4 blocks on 8 shafts. I wanted you to understand the limitations, not because I think you should go out and buy more shafts, but because I have seen people take a profile draft, change the structure and then not being able to figure out what to do.

Let's take an example. We already know that summer and winter, or single, two-ties, unpaired structure with a 1:1 ratio needs 1 additional shaft per block, with 2 reserved for the ties. On 8 shafts, you can weave 4 blocks. In fact, you only need 6 shafts.

A possible next structure to explore is to keep everything the same, except instead of single, use a double.

So, let's take a double, two-ties, unpaired unit weave, with a 1:1 ratio: Block A is: 1, 3, 2, 4. Two shafts for the ties again, leaving 6 for the pattern; each block needs 2 pattern shafts ("double"), so it cannot be woven on 8 shafts. Block B uses 5 and 6 and block C uses 7 and 8.

This *does not mean* that we cannot weave a double, two-ties, unpaired unit weave, with a 1:1 ratio on 8 shafts, just that the profile draft with 4 blocks needs more shafts for this structure.

But here is the beauty of unit weaves: unlike some other weaves where the blocks have to be woven consecutively or make adjustments, with unit weaves, we have no limitations in the arrangement. To weave it on 8 shafts, we can change the profile draft to: A, BB, C, BB, repeat.

So, obviously on 8 shafts we cannot weave a triple, two-ties unpaired unit weave. But we can change the ties. How about a single, three unpaired ties with a 1:1 ratio? That was in the tied weaves handout. We reserve 3 shafts for the ties, then we have 5 shafts left for the pattern blocks, so we actually only need 7 shafts to weave the structure.

It is true that with some of these structures we quickly run out of treadles, but that's why I wanted you to concentrate on the threading. Blocks can be easily combined with unit weaves, so the treadle limitations can be easily overcome.

It's perfectly fine to look at ideas in Strickler, just as long as we understand the structure AND don't use the misnomers as we talked about a couple of months ago. It is like looking up a word in the dictionary.

I hope this clarifies the challenge a bit and if you don't finish, well, there is always next month.