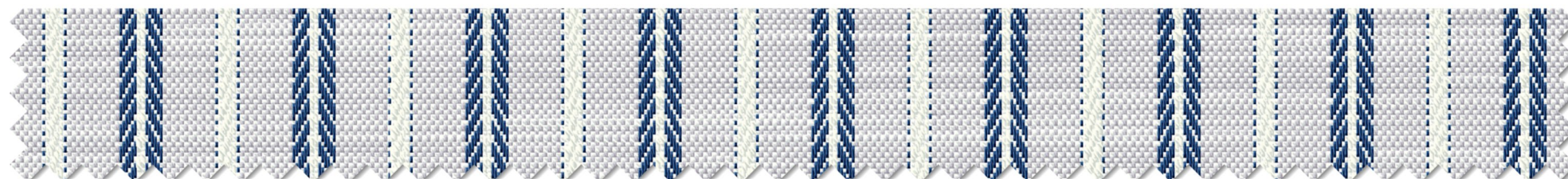
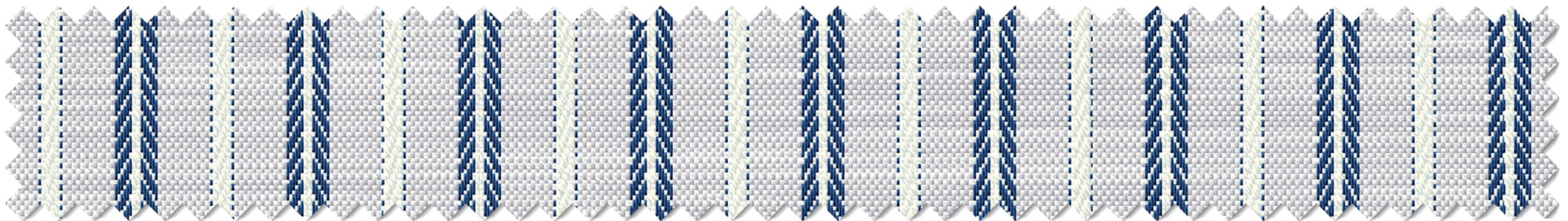




ArahWeave® Dobby Quick Start



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HOW TO VIEW FABRIC IN ARAHWEAVE

Your ArahWeave will open with a default fabric. The first thread of the fabric is in the bottom left corner.

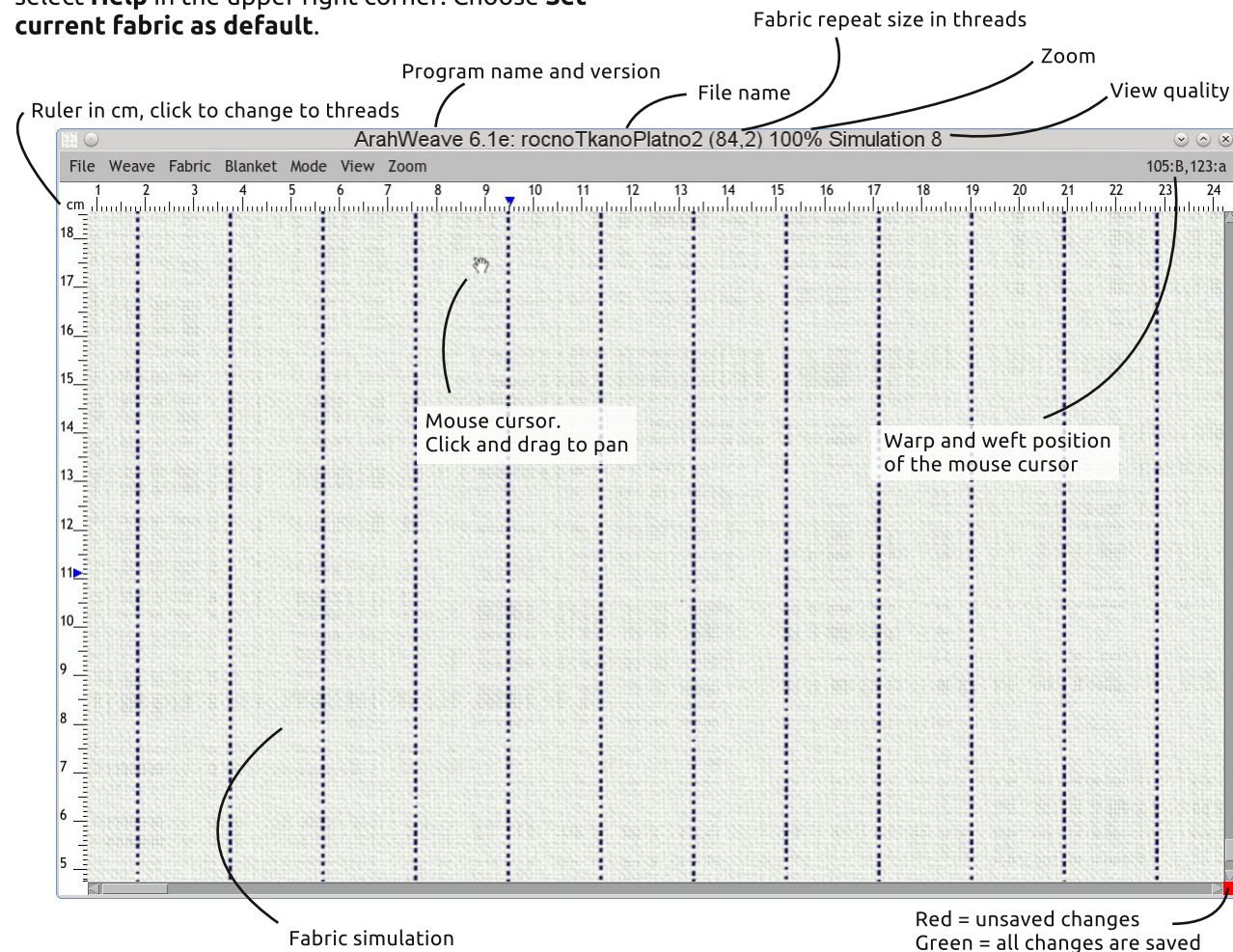
Changing the default fabric

To change the default fabric, load the fabric and select **Help** in the upper right corner. Choose **Set current fabric as default**.

Making your first fabric with ArahWeave

To make a fabric, we need to define five things:

- weave (the interlace of threads)
- yarn colors
- warp and weft pattern (sequence of yarns)
- fabric density
- yarn properties



Fabric repeat size

Combines the following repeats:

- weave
- thread pattern
- denting / regulator

If these three repeats are divisible, than the fabric repeat is the same as the larger repeat. If they are not divisible, than the fabric repeat is the smallest number which divides all three repeats.

View modes



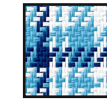
Weave = shows the weave in repeat



Integer = shows yarn colors, ignores fabric density



Shaded integer = integer view with added shades



Simulation = realistic fabric simulation, the numbers refer to simulation quality

Zoom

Zooming in and out can be done in different ways:

- choose the zoom from the menu
- press + or - button on the keyboard
- hold Ctrl and roll the mouse wheel
- press shortcut keys 0 - 9 or Ctrl + 0 - 9

Zoom 1 shows the fabric in real size.

Selecting, copying and exchanging properties



Left click = select



Right click = copy




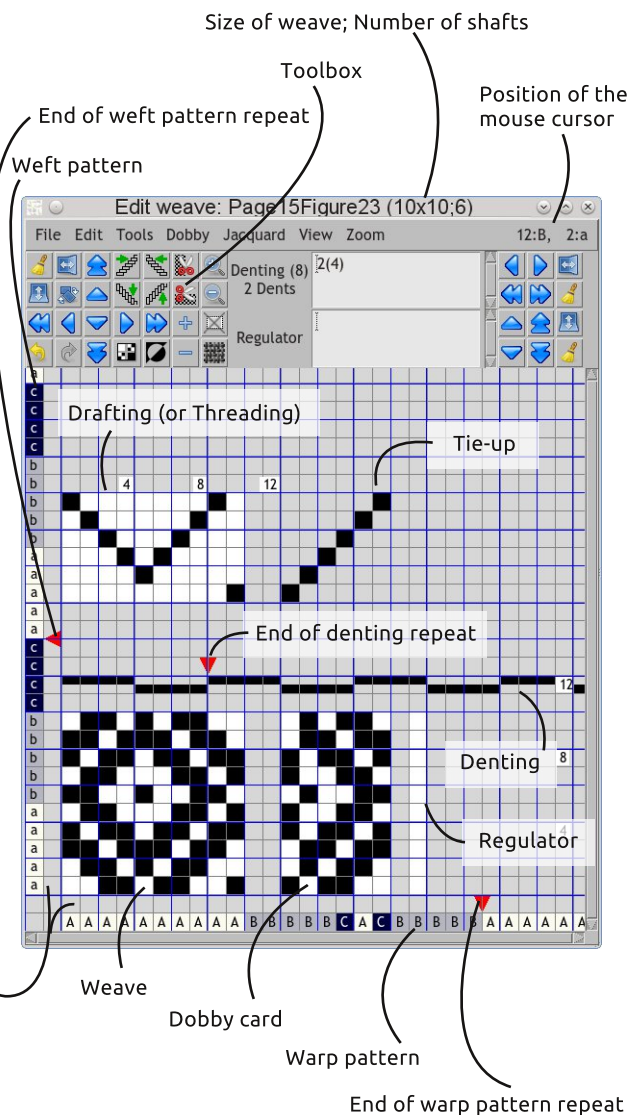
Middle click (mouse wheel) = exchange



HOW TO DRAW A WEAVE

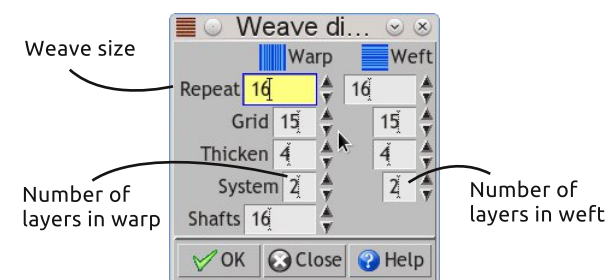
1. To open the **Weave editor**, go to **Weave > Edit**, or right click on the fabric simulation.
2. To display a dobby card and drafting (threading), choose **View > Dobby**.
3. Middle-click inside the gray area, next to the warp / weft pattern to change the size of the weave. Or go to **Edit > Dimensions**.
4. To make a weave, do one of the following:
 - Draw black points with left click, and white points with right click. Use the tools from the toolbox to speed up the drawing.
 - Go to **File > Browse** and load a weave from Arahne database.
5. Use the tools from the toolbox to speed up your work. Tools also work on the selected part of the weave. To make a selection, hold Shift while dragging the mouse.
6. To change the denting or regulator, do one of the following:
 - Write inside the **Denting** and **Regulator** field, next to the toolbox.
 - Draw inside the **Regulator** column, next to the dobby card. Left click makes a black point, right click makes a white point. The regulator is active on black point.

Note: If you would like to copy and paste a part of weave, first select the part you would like to copy (hold Shift while dragging the mouse). Then paste it by clicking dragging the mouse. Clear selection when finished, click the icon in the toolbox. 



HOW TO MAKE A DOUBLE WEAVE

1. Open the **Edit weave** window by going to **Weave > Edit**.
2. In the new window, go to **Edit > Dimensions** and set weave size and system. System is the number of layers in warp and in weft.



3. In the **Edit weave** window, go to **Tools > Edit decomposed**. Enter the system, number of layers in warp and weft in the upper right corner.
4. Leave both **Edit weave** and **Edit decomposed** windows open, so you can see the compound weave and the decomposed weaves at the same time. All changes made in **Edit decomposed** window will be instantly visible in **Edit weave** window and vice versa.
5. In **Edit weave** window, go to **View > Cross section** to enable it.



6. To edit decomposed weaves, do one of the following:
- Draw black points with left click, and white points with right click. Use the tools from the toolbox to speed up the drawing.
 - Go to **File > Browse** and load a weave from Arahne database.

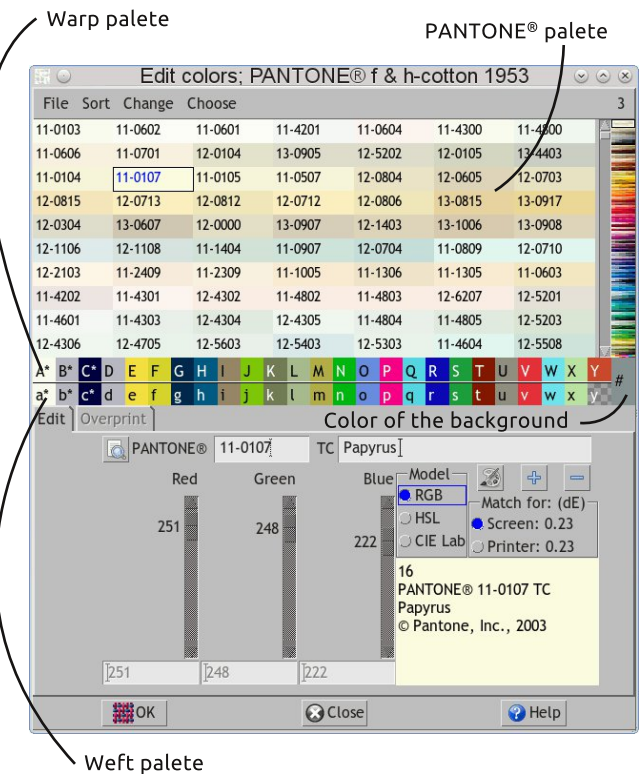
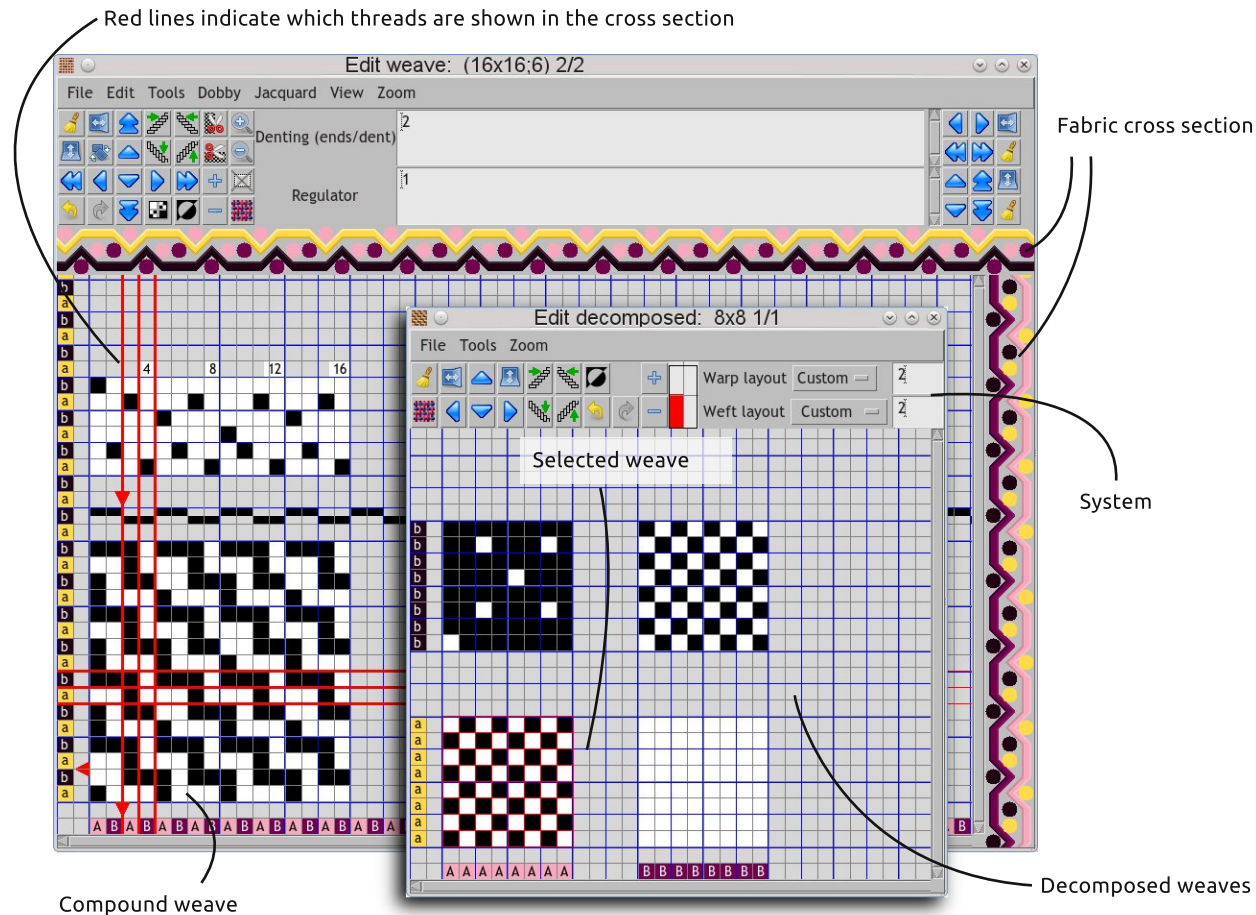
- Press keys from 0 to 9 to load a default weave.

7. To copy weaves in the **Edit decomposed** window, select a weave by left clicking on the gray area around the weave. When weave is selected, its grid becomes red. Then right click to copy the weave.

HOW TO CHANGE COLORS OF THE YARNS

1. To open the **Color editor**, go to **Fabric > Colors**.
2. Go to **Choose** and select the palette you use, for instance PANTONE® for fashion and home.
3. Select color from the PANTONE® palette with left mouse click and copy it inside warp / weft palette with right mouse click.
4. Choose a color for the background.

Warning! Copying in **Edit colors window will copy the color but not the yarn properties.**







HOW TO CHANGE WARP OR WEFT PATTERN

1. Open the **Thread pattern editor**, by selecting **Fabric > Thread pattern**.
2. Choose the unit in which you would like to write the pattern (mm or threads) from the drop down list in the upper left corner.
3. Write the warp and weft pattern. For instance 5A10B means the warp pattern is 5 threads of yarn A and 10 threads of yarn B.
 - Use the round parentheses to multiply a part of the pattern. For instance 3(1A1B) means repeat pattern 1A1B three times: 1A1B1A1B1A1B
 - Use square parentheses to repeat a certain pattern for a number of threads. For instance 5[1A1B] means keep repeating pattern 1A1B for the next five threads: 1A1B1A1B1A

4. Use the tools to move, mirror or elongate the pattern.



5. Copy the pattern from warp to weft or vice versa with green arrows if needed.   You can also copy a specific thread between warp and weft palette. Select = left click, copy = right click, exchange = middle click.

Warning! Copying in Edit warp and weft pattern window will copy colors and yarn properties.

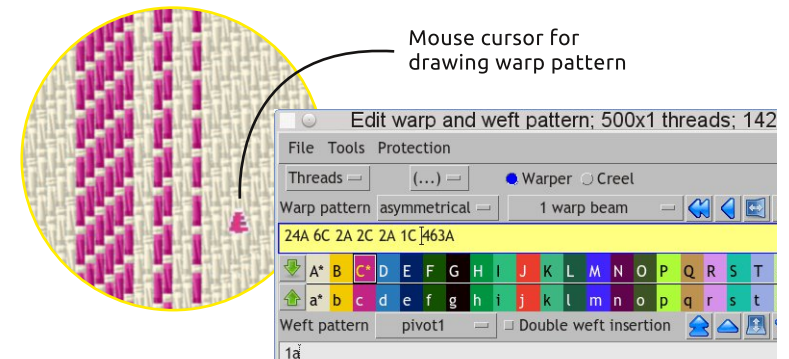
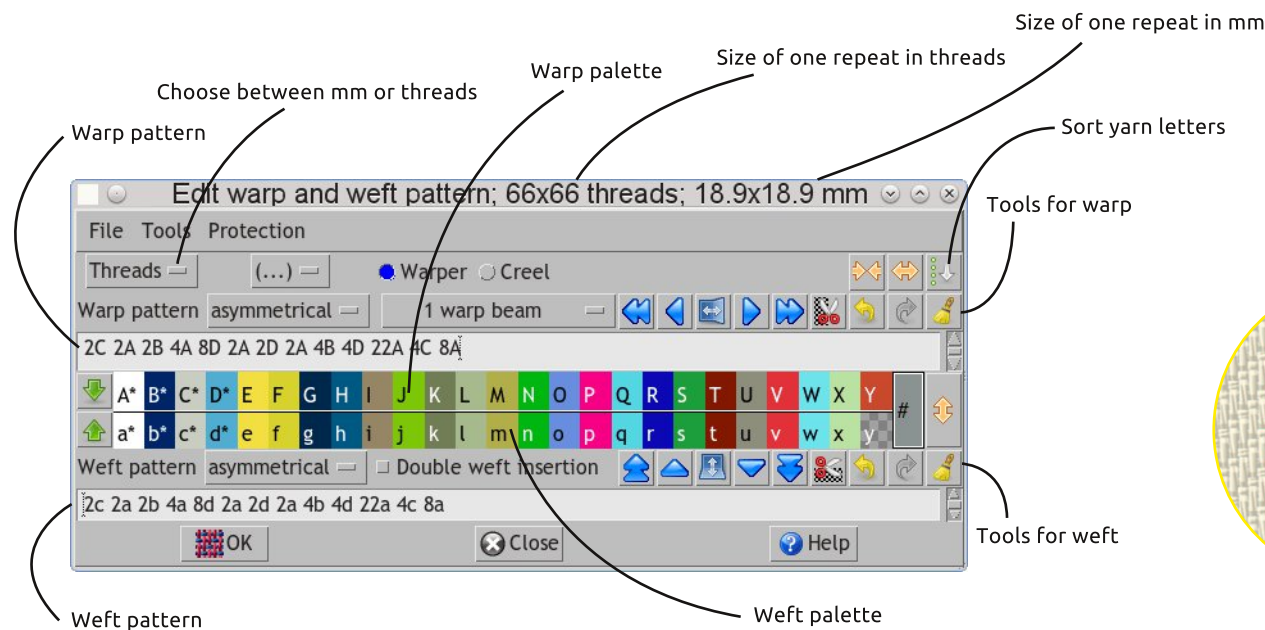
Tips: The asterisk beside letter in thread palette shows threads used in the fabric. Click on a yarn letter to see where it is used in the pattern. Press enter and current cursor position will blink in the fabric.

Drawing thread pattern directly in the fabric simulation

Another way of changing the warp and weft pattern is by drawing over the fabric simulation. This function will not work if repeat is smaller than 10 threads.

1. The **Thread pattern editor** window has to be open, to enable drawing. Enter the number of threads in your repeat. For instance 500A (500 threads of yarn A). Click **OK**.
2. In the **Thread pattern editor** window, choose the yarn letter with which you would like to draw.
3. The mouse cursor in fabric simulation changes into cone  or shuttle  colored in the selected color. Do one of the following:
 - Click and drag to draw.
 - Hold Ctrl and click to fill.
 - Hold Shift and click to insert.

Note: Double click on the yarn letter in thread palette will protect the threads with that letter. Area with protected yarn will not be modified. Protection also works in weave editor.



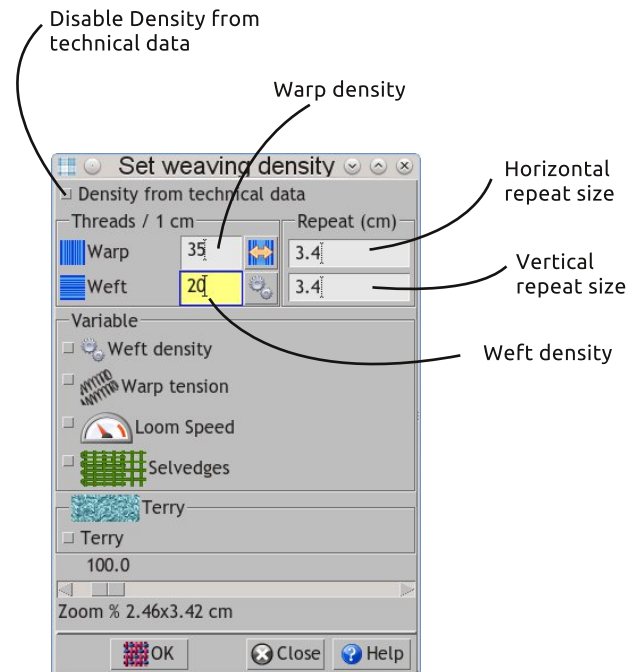


HOW TO CHANGE FABRIC DENSITY

Manual entry of density

1. To change the density, go to **Fabric > Density and control**. If the fields are grayed out, disable **Density from technical data** (upper left corner). Do one of the following:
 - Enter warp and weft density
 - Enter the fabric repeat in cm and the program will calculate the density. Fabric repeat combines weave repeat and thread pattern repeat.

Note: When Density from technical data is disabled, some fabric simulation effects will not be visible (empty dents, variable density, regulator).



Density from technical data

1. Enter the technical details through **Fabric > Consumption**. You will need to know the details of your loom settings.
2. Enter the required information. All variables regarding fabric width are without selvages.
3. If a field becomes red, it means that one of the variables is wrong. Correct it manually or press the light bulb to calculate it automatically.
4. Enable **Density from technical data**.

Calculation of thread consumption

Threads in fabric width 6120

Warp length (m) 200

Reed number (Dents / 1 cm) 8.5

Denting (ends/dent) 4

Selvage denting 1

Selvage dents 1

Weft density (threads/1 cm) 32

Take-up (%) 2.6

Reed width (cm) 180

Raw width (cm) 174

Finished width (cm) 150

Selvage pattern 20A

Waste warp (%) 4

Waste weft (%) 3

Weaving shrinkage (%) 1

Finishing shrinkage (%) 2.5

Finishing weight change (%) 2.5

☒ Density from technical data

CAD filename /home/ana/WEAVE/tkanine/Ana/karo1

	Reed number	Reed width	Denting	Dents
Warp length	200 m			
Raw length	194.8 m			
Fabric length	190.05 m	8.5 / 1 cm	180.00 cm	4 1530
Raw width	174 cm	Selvage 2 x 2.35 cm		2 x 20
Finished width	150 cm	Total 184.71 cm		1570
Warp threads	6120 + 2x20			
Density Warp	40.8 / 1 cm			
Density Weft (Loom)	32 / 1 cm			
Density Weft (Raw)	32.32 / 1 cm			
Density Weft (Finished)	33.13 / 1 cm			
Take-up	2.6%			
Waste warp	4%	Repeat	Weave	Design
Waste weft	3%	Warp	4	122
Weaving shrinkage	1%		2 Shafts	2.99 cm
Finishing shrinkage	2.5%			1 Dents
				Weave Design
				244
				Total
				244
				5.98 cm
				5.98 cm

Entry fields for fabric technical data

Enable density from technical data

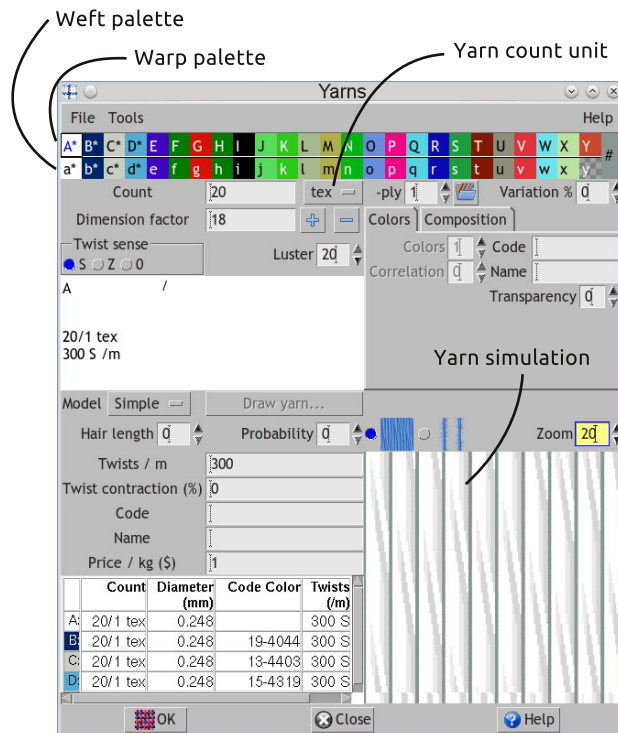
Calculated data



HOW TO CHANGE YARN DIAMETER

1. To open the **Yarn editor**, go to **Fabric > Yarns**.
2. The asterisk beside letter in the palette indicates which yarns are used in the fabric. Click on the yarn you would like to edit.
3. Choose the unit for the yarn count, enter the yarn count and number of plies.
4. Zoom in the yarn simulation and increase or decrease the dimension factor to get the desired yarn diameter.

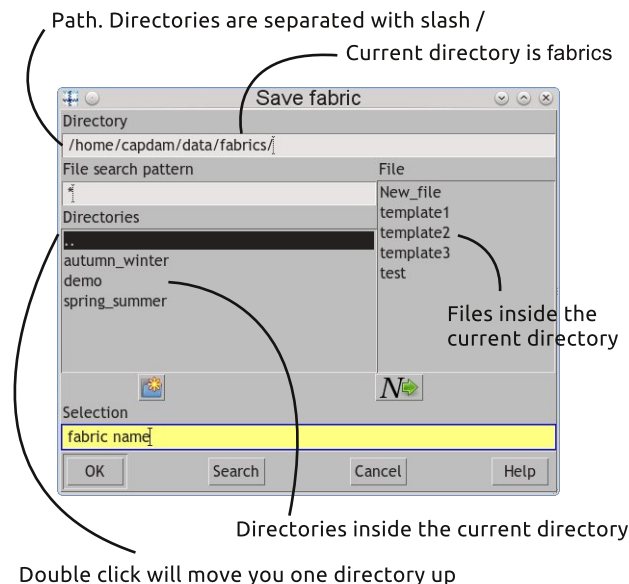
Warning! Copying in **Yarn editor** window will copy yarn properties but not the color.



HOW TO SAVE THE FABRIC

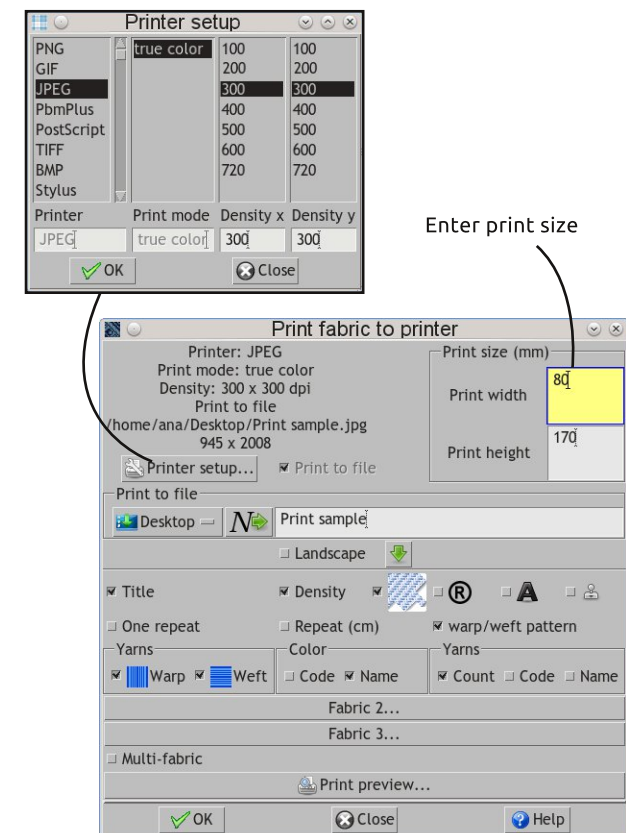
1. To save the fabric, go to **File > Save fabric as**.
2. Navigate to the folder in which you would like to save the fabric.
 - Navigate by writing the path in the upper left corner.
 - By double clicking on two dots (..) in the Directories section, which will move you one directory up.
 - By double clicking on the directory name.
3. Write the fabric name or click on the **N** icon to generate one from labels in properties.

Note: When saving the fabric, the following parameters will be saved: weave, thread pattern, used colors, used yarns, technical data, density, regulator, denting. Saving fabric does not save fabric as image.



HOW TO SAVE FABRIC SIMULATION AS IMAGE

1. Go to **File > Print fabric to printer**.
2. Choose the file type (JPG, PNG, TIFF, ...) by clicking on **Printer setup**. Select the desired DPI. Click **OK**.
3. Enter the size of the printout in the upper right corner.
4. Enable the options you would like to see on your printout.





Print sample

Warp: 22/1 cm
Weft: 17/1 cm
Weave: 24x6; 12 Shafts



Warp pattern[12]: 1A10B1C

A 25/2 tex 540 S Coriander	B 25/2 tex 540 S Bleached Sand	C 25/2 tex 540 S Ivory
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Weft pattern[1]: 1a

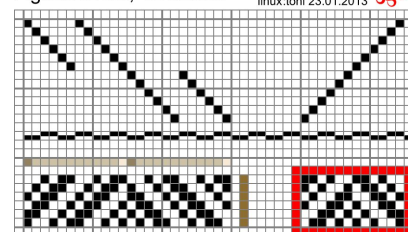
a 40/1 tex 540 S
Lark

HOW TO SAVE WEAVE AND DOBBY CARD AS IMAGE

1. Go to **Weave > Edit**, or right click on fabric simulation, to open the **Edit Weave** window.
2. In **Edit weave** window, go to **File > Print weave**. Choose the file type (JPG, PNG, TIFF,...) by clicking on **Printer setup**. Select the desired DPI. Click **OK**.
3. Enter the size of the printout in the upper right corner.
4. Enable the options which you would like to see on your printout. The dobbie card is one of the options.

Size of weave

Figure2 24x6; 12 Shafts

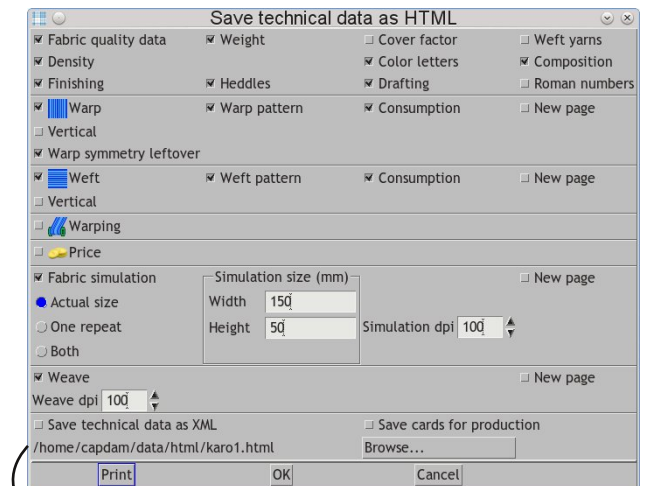


HOW TO SAVE TECHNICAL DATA SHEET

1. Go to **File > Save technical data as HTML**.
2. Enable the options you would like to see in your technical data sheet, and do one of the following:
 - Click **OK** to save the technical data sheet as a HTML file. The information about file location is written in the bottom left corner.
 - Click **Print** to open the technical data sheet in a web browser and save it at the same time.

If you would like to make a PDF file, open the technical data sheet in a web browser (in previous step click Print button).

In the web browser, go to File > Print. Depending on the browser, choose PDF or Print to file > PDF. Give it a name and click Print or Save.



Saved file location

Technical data sheet

Drafting: Straight drafting 2
Selvage pattern: 1A
Warp pattern (65x): 2C 2A 2B 4A 8B 2A 2B 2A 4B 4D 22A 4C 8A 4C 22A 4D 4B 2A 2B 2A 8B 4A 2B 2A
Leftover (78 threads): 2C 2A 2B 4A 8B 2A 2B 2A 4B 4D 22A 2(4C 8A)

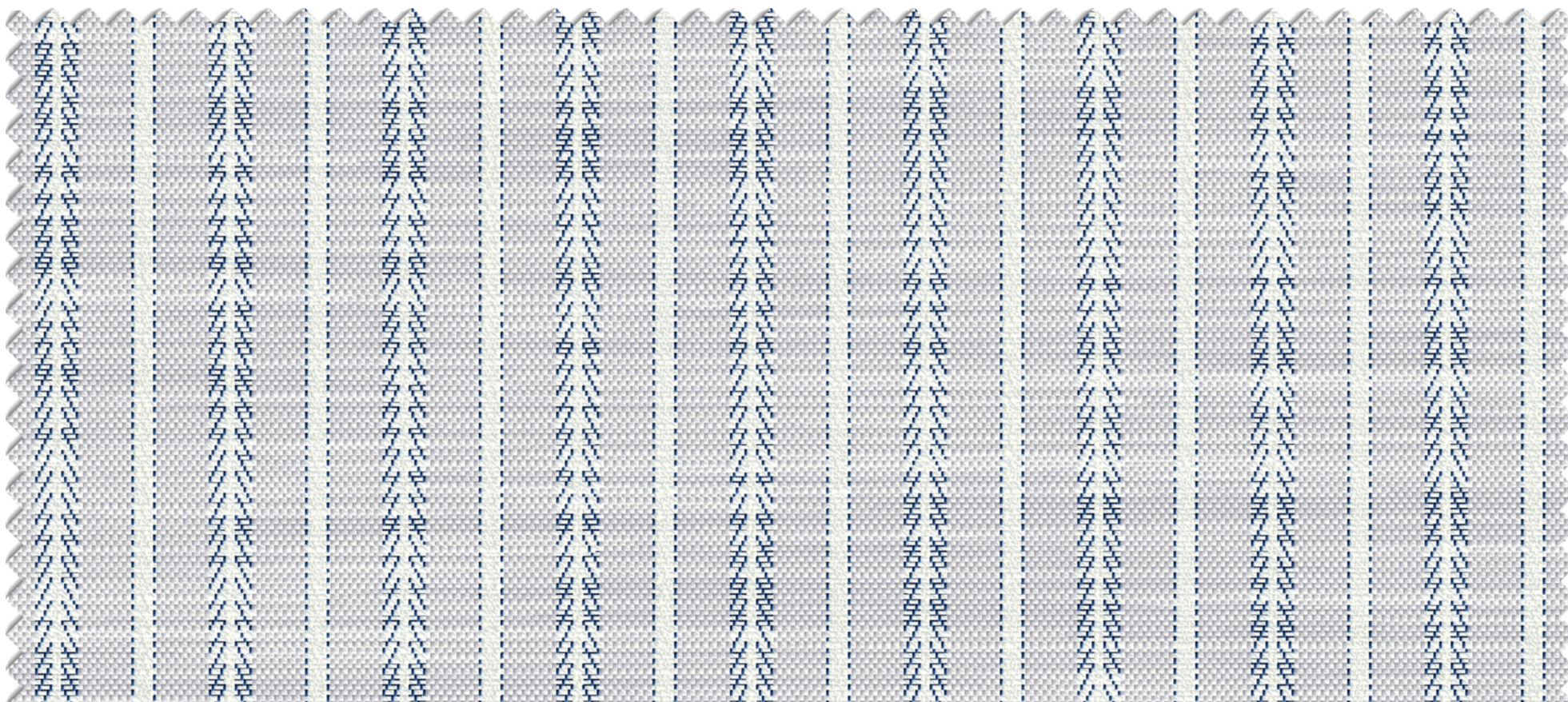
Warp	Repeat threads	Design threads	Selvages threads	Total threads	Repeat %	Design kg	Selvages kg	Total kg
A	72	4728	2*1	4730	59.02	14.950	0.006	14.957
B	12	786	0	786	9.84	2.485	0.000	2.485
C	10	660	0	660	8.20	2.087	0.000	2.087
D	28	1834	0	1834	22.95	5.799	0.000	5.799
Total	78+65*122	=8008	+2	=8010		25.322	+0.006	=25.328

Warp	A	B	C	D
Count	20/1 tex	20/1 tex	20/1 tex	20/1 tex
Twists(m)	300 S	300 S	300 S	300 S
1	19-4044 Limoges	13-4403 Silver Birch	15-4319 Air Blue	

Weft pattern: 2C 2A 2B 4A 8B 2A 2B 2A 4B 4D 22A 4C 8A 4C 22A 4D 4B 2A 2B 2A 8B 4A 2B 2A

Weft	Repeat threads	Design %	kg
a	72	59.02	10.694
b	12	9.84	1.782
c	10	8.20	1.485
d	28	22.95	4.159
Total	122		18.120

Weft	a	b	c	d
Count	20/1 tex	20/1 tex	20/1 tex	20/1 tex
Twists(m)	300 S	300 S	300 S	300 S
1	19-4044 Limoges	13-4403 Silver Birch	15-4319 Air Blue	



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