

Crunching the numbers: Weft Yarn Required



THE
Handweaving
Academy

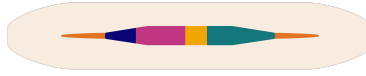
Length of Weft Pick

You'll need this number for all the other calculations:

<i>Length of each weft pick (inches or cm)</i>	Warp width in reed		
	+ 10%	x	1.1
	= Length of each weft pick	=	

Weft Yarn Required [Imperial]

<i>Weft yarn required in the entire project or of a specific yarn (Imperial)</i>	Total woven length in inches		
	x Weft picks per inch	x	
	= Total weft picks	=	
	x Length of each weft pick	x	
	= Total length of weft req'd in inches		
		÷ 36	36
	= Total length of weft req'd in yards	=	
	÷ Yards per pound of weft yarn	÷	
	= Pounds of weft yarn required	=	
		x 16	16
	= Ounces of weft yarn required	=	



Weft Yarn Required [Metric]

*Weft yarn required in the entire project **or of a specific yarn** (Metric)*

Total woven length in cm	
x Weft picks per cm	x	_____
= Total weft picks	=	_____
x Length of each weft pick	x	_____
= total length of weft req'd in cm		_____
	÷ 100	÷ 100
= Total length of weft in meters	=	_____
÷ Meters per kg of weft yarn	÷	_____
= Kg of weft yarn required	=	_____
	x 1000	x 1000
= Grams of weft yarn required	=	_____

Maximizing Available Weft Yarn

Max weft picks or length possible given limited supply of yarn

Length of yarn available		_____
÷ Length of weft pick	÷	_____
= Max weft picks possible	=	□
Max weft picks possible	
÷ Weft sett	÷	_____
= Max woven length possible	=	□



Amount of Weft Yarn Required: Specific Yarn or Part

Use this table to calculate the amount of a specific weft yarn required or the amount of weft needed to weave a given length of fabric, such as one inch or one treadling repeat.

If you know the number of picks in the given length, skip the first two rows of the table.

<i>Number of weft picks and yarn req'd for a specific yarn or woven length</i>	Woven length, specific yarn or unit	-----
	x Weft sett	÷
	= Weft picks, specific yarn or unit	=
	x Length of weft pick	x
	= Weft req'd for specific yarn or unit	=



Maximizing Available Warp Yarns

Calculate the maximum warp ends or length possible given a limited supply of yarn.

$$\begin{array}{l} \text{Length of yarn available} \\ \div \text{Overall length of warp} \\ = \text{Max warp ends possible} \end{array} \begin{array}{l} \frac{\text{-----}}{\text{-----}} \\ = \\ \text{-----} \end{array}$$

$$\begin{array}{l} \text{Length of yarn available} \\ \div \text{Number of ends in warp} \\ = \text{Max warp length possible} \end{array} \begin{array}{l} \frac{\text{-----}}{\text{-----}} \\ = \\ \text{-----} \end{array}$$