



Plan Your Project

I am going to make: _____ IN _____
Item* Project Yarn*

Warp Calculations:

$$\frac{\text{Finished Length of Item}^*}{\text{Hem or Fringe}^*} + \frac{\text{Hem or Fringe}^*}{\text{Hem or Fringe}^*} = \frac{\text{Total Length of Each Item}}{\text{Hem or Fringe}^*}$$

$$\frac{\text{\# of Items to be Woven}}{\text{Total Length of Each Item}} \times \frac{\text{Total Length of Each Item}}{\text{Total Length of Each Item}} = \frac{\text{Woven Length (inches)}}{\text{Total Length of Each Item}}$$

$$\frac{\text{Take-up}^*}{\text{Woven Length (inches)}} + \frac{\text{Shrinkage}^*}{\text{Woven Length (inches)}} \times \frac{\text{Woven Length (inches)}}{\text{Woven Length (inches)}} = \frac{\text{Total Take-up and Shrinkage (inches)}}{\text{Woven Length (inches)}}$$

$$\frac{\text{Loom Waste}^*}{\text{Total Length of Warp (inches)}} + \frac{\text{Total Take-up and Shrinkage}}{\text{Total Length of Warp (inches)}} + \frac{\text{Woven Length}}{\text{Total Length of Warp (inches)}} = \frac{\text{Total Length of Warp (inches)}}{\text{Total Length of Warp (inches)}}$$

$$\frac{\text{Total Length of Warp (inches)}}{36} = \frac{\text{Total Length of Warp (yards)}}{36}$$

$$\frac{\text{Width (of item) in the Reed}}{\text{EPI}} \times \frac{\text{EPI}}{\text{EPI}} = \frac{\text{Total \# of Ends}}{\text{EPI}}$$

Color 1: _____ X _____ = _____
Total Length of Warp (yards) # Warp Ends* Yards Needed for Warp

Color 2: _____ X _____ = _____
Total Length of Warp (yards) # Warp Ends* Yards Needed for Warp

Color 3: _____ X _____ = _____
Total Length of Warp (yards) # Warp Ends* Yards Needed for Warp

Weft Calculations:

$$\begin{array}{cccccc} \underline{\hspace{2cm}} & \times & \underline{\hspace{2cm}} & \times & \underline{\hspace{2cm}} & \times & \underline{\hspace{2cm}} & \times & \underline{\hspace{2cm}} & = & \underline{\hspace{2cm}} \\ \# \text{ Items to be} & & \text{Total Length} & & \text{Width in Reed} & & \text{Sett} & & \text{Take up \&} & & \text{Total Weft Needed} \\ \text{Woven} & & \text{of Each Item} & & & & & & \text{shrinkage*} & & \text{(inches)} \end{array}$$

$$\underline{\hspace{2cm}} \div 36 = \underline{\hspace{2cm}}$$

Total Weft Needed (inches) Total Weft Needed (yards)

Color 1: $\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

Total Weft Needed (yards) % Of Weft* Yards Needed for Weft

Color 2: $\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

Total Weft Needed (yards) % of Weft* Yards Needed for Weft

Color 3: $\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

Total Weft Needed (yards) % of Weft* Yards Needed for Weft

Add warp and weft together to find total yarn needed:

Color 1: $\underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

Total Warp Needed (yards) Total Weft Needed (yards) Total Yards Needed for Project

Color 2: $\underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

Total Warp Needed (yards) Total Weft Needed (yards) Total Yards Needed for Project

Color 3: $\underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

Total Warp Needed (yards) Total Weft Needed (yards) Total Yards Needed for Project

Explanations

<p>* The Item is what you are going to make. For example: a Scarf, Dishtowel or Mug Rug.</p>
<p>* Project Yarn is what yarn you are planning to use for the warp. For example: 5/2 mercerized cotton yarn.</p>
<p>* The Finished Length of Item is how long each item will be when it is finished.</p>
<p>* Hem or Fringe includes whatever you will weave or allow to finish your item. 1.5 " on each side works well for a nice hem on most items. Fringe is really a matter of taste: for short fringe use 3", for medium fringe use 6" and for long fringe use 12" for each side of the item. Keep in mind that the fringe length loses about 25% when plied. Remember to include hem or fringe on both sides of your item.</p>
<p>* Take-up is the extra yarn that will be needed to go over and under the weft yarns. We usually use 10% for take-up with mercerized cotton yarn. Warp Rep with large filler uses more, small wefts and flat weaves use less. Use the number as a decimal on the sheet, e.g. 0.1 for 10%)</p>
<p>* Shrinkage is how much you expect the yarn to shrink in washing and drying. This varies by fiber. Wool shrinks more than cotton, unmercerized cotton yarn shrinks more than mercerized. We usually use 5% for shrinkage with mercerized cotton yarn, 10% for unmercerized yarn. Use the number as a decimal on the sheet, e.g. 0.1 for 10%)</p>
<p>* Loom Waste is the amount of warp yarn that you will not be able to weave or used for sampling. Included in this number is the amount used at the beginning to tie to the front apron rod, the yarn that you won't weave at the end. We usually use 27" or 36".</p>
<p>* Width in Reed and EPI (Ends Per Inch) come from your pattern.</p>
<p>* Raddle Dents per Inch depends on your raddle. Most commercial raddles have 1, 2 or 4 dents per inch.</p>