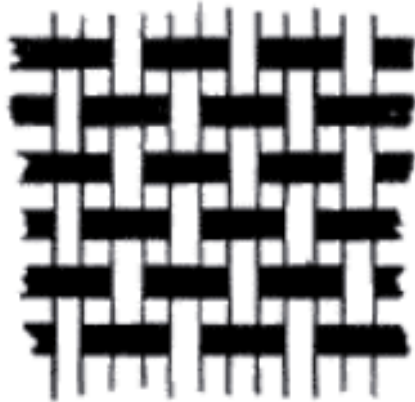
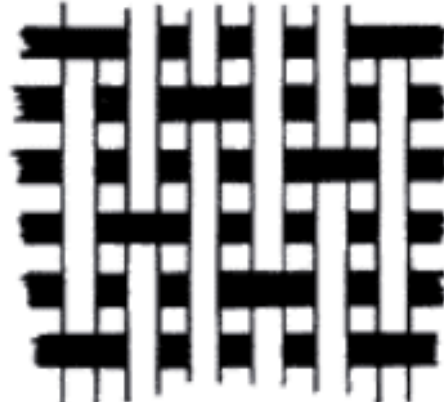


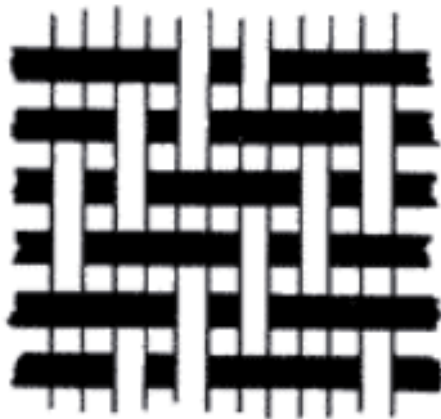
Llama Song: Weaving Patterns



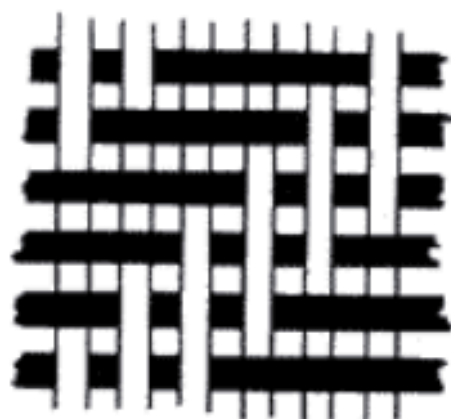
Plain Weave



5-Harness Satin Weave



2/2 Twill Weave



3/3 Twill Weave

Fabric Structure:

The form of interlacing of warp and weft yarns can be divided basically into three categories- plain, twill and satin/sateen weave. These three kinds of forms are called basic weaves.

1. Plain Weave:

The simplest of all weaves is the plain weave. Each filling yarn passes alternately over and under one warp yarn. Each warp yarn passes alternately over and under each filling yarn. Some examples of plain-weave fabric are crepe, taffeta, organdy, and muslin. The plain weave may also have variations, which include the following:

- **Warp rib weave-** Warp rib weaves may be described as plain weave in which two or more picks are inserted in the same shed. Warp rib weaves are normally used in warp faced constructions. The warp cover factor and the warp crimp are substantially higher than the weft cover factor and the weft crimp. The intention is to produce fabrics with prominent weft-way rib formed by the crowns of the warp threads.
- **Weft rib weave-** Weft rib may be described as plain weave in which two or more ends weave together as one. It is difficult to achieve very high weft cover factors in weft faced plain-weave cloths. By using two finer ends weaving as one, it becomes possible to achieve higher weft cover factor. Such cloths are expensive to weave and not very common.
- **Basket, matt or hopsack weave-** In matt, basket or hopsack weaves two or more ends and two or more picks weave as one. The simplest and commonest of these weave is 2/2 matt.

2. Twill Weave:

A weave that repeats on 3 or more ends and picks & produces diagonal lines on the face of the fabric. A twill weave is characterized by diagonal rib (twill lines) on the face of the fabric. These twill lines are produced by letting all warp ends interlace in the same way but displacing the interlacing points of each end by one pick relative to that of the previous end. In twill weave line moves sinistrally (Right - Left, Z twill) and dextrally (Left - Right, S twill). Common derivatives of twill weave are as follows:

- **Zigzag weave-** If the direction of the diagonal in a twill fabric is reversed periodically across the width, a zigzag effect is produced. Zigzag weave is achieved by simply combining two S and Z twill weaves of equal repeat.
- **Diamond weave-** Diamond weaves are achieved by combining two symmetrical zigzag weaves of equal repeat. Diamond designs are vertically and horizontally symmetrical.
- **Herringbone weave-** In Herringbone weave also the twill direction is reversed periodically like zigzag weave but at the point of reversal the order of interlacement is also reversed and then twill line commence as usual.