### - Pattern Making

Pattern making is the art of manipulating and shaping a flat piece of fabric to conform to one or more curves of a human figure. Pattern making acts as a bridge between design and production. A sketch can be turned into a garment via a pattern which interprets the design in the form of the garment components.

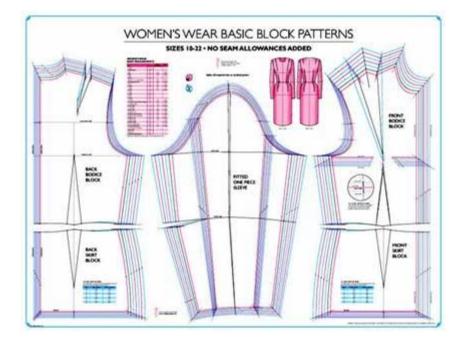
A pattern is flat while the body is not. The body has height, width and depth. Within this roughly cylindrical framework, there are a series of secondary curves and bulges, which are of concern to the pattern maker. Thus, darts are the basis of all pattern making. The darts converts the flat piece of cloth into a three dimensional form, which fits the bulges and curves of the body.

A pattern is made normally from a flat sketch with measurements or a two dimensional fashion illustration. The basic pattern is the very foundation upon which the pattern making, fir and design are based. The basic pattern is the starting point for flat pattern designing. It is a simple pattern that fits the body with just enough ease for movement and comfort.

There are three methods of pattern making. They are explained in detail as follows:

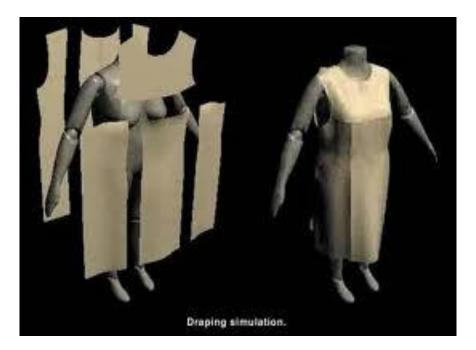
### DRAFTING

This method involves measurements derived from sizing system or accurate measurements are taken on a person, dress or body form. Measurements for chest, hip, waist and so on and ease allowances are marked on paper and construction lines are drawn to complete the pattern. Drafting is used to create basic, foundation or design patterns.



### DRAPING

This method involves the draping of a two dimensional piece of fabric around a form, conforming to its shape, creating a three-dimensional fabric pattern. This muslin is then transferred to a paper to be used as final pattern. Ease allowances for movement are added to make the garment comfortable to wear. The main advantage of draping is that the designer can see the overall design effect of the finished garment on the body form before the garment piece is cut and sewn. However, the draping method is more expensive and time consuming as compared to flat pattern making.





FLAT PATTERN MAKING

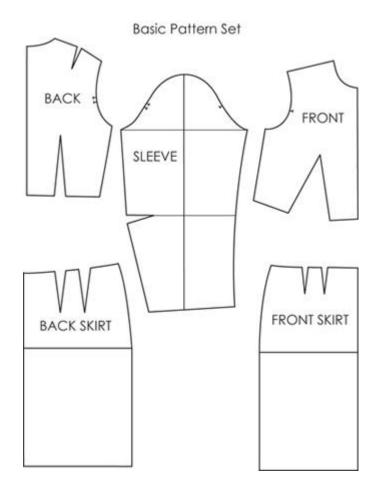
This method involves the making of a fitted basic pattern with comfort ease to fit a person or body form. A sloper is the starting point for flat pattern making. Five basic pattern pieces are used for women clothing as follows:

Snug-fitting bodice front Bodice back with darts Basic neckline Sleeve Fitted skirt front and back with darts

However, as fashion changes frequently, women styles fluctuate frequently accordingly. These basic slopers are then manipulated to create fashion.

A basic sloper has no seam allowances which facilitates its manipulations to various styles. It has no design interest, only construction lines are marked on it. It is imperative that the basic structure of a sloper should be such that adjustments can be introduced easily.

The flat pattern making is widely used in the ready-to-wear market because it is fast and accurate.



It is also important to understand that the pattern making today has become an easy job with the use of computers. Different softwares are available in the market to meet the needs of the manufacturers. Some of these are Gerber, Lectra, Tukatech, Optitex etc.

Pattern-making software enables us to input the measurements and draft out a pattern. These software draft patterns to fit the required specs specifically, eliminating much fitting trial and error in sewing room.

A pattern can be made from a 3D form in just a few steps by using these softwares. An individual's measurements are collected from 3D body scanner. These measurements are used to create a virtual 3D model of the individual's body. The 3D to 2D software defines a garment surface in relation to the 3D body model. Once the garment surface is defined, the application automatically unwraps and outputs a 2D platform in .dxf format.

# - Actual Sewing Of The Sample Garment

After the idea is conceived, sketching is done, patterns are made, the final process is the sewing of the actual garment.

As a first step, the paper patterns are being laid on the fabric, traced and then cut out by the sample cutter.

Secondly, these cut panels are normally given to the best sewer available at the sewing facility. Most factories maintain a special "Sample Room" which has specially trained sewers for sampling only. This helps a lot because the sewers are trained to make samples only and also they understand the importance of sampling. So they make the samples cautiously by following precise instructions and also they follow point by point details.

During the time, the sample garment is sewn, the design staff also remains present there to solve any construction problems.

Once the sample garment is completed sewing, it is than pressed properly.

## - Testing The FIT And Other Things

The next step is to test the sample for fit, drape and visual appearance of a design on a "real" human being, effectively acting as a live mannequin. A person is selected to work as a fitting model primarily on criteria matching the desired measurement specifications of the designer or manufacturer. These specifications generally consist of height, bust-waist-hip circumference, arm and leg length, shoulder width and a myriad of measurements as indicated by the garment type.

Beyond merely wearing the garment for inspection, a fitting model plays an integral role in the design process; commenting on garments and materials with regards to fit, movement and feel on flesh and objective feedback on the fit and design of the garments in the stead of the consumer. Thus the fitting model aids in conforming that the sizing, design and cut of the garment to be produced meets the designer's specifications and intentions. During this time, the designer, as his or her own best critic, must also be objective in judging the design.

