

FABRIC FINISHES

Different finishes are applied to fabrics and textile products to alter their properties...

- Changing the texture of the fabric
- Changing the appearance/the look of the fabric
 - Add strength to the fabric
- Give protection against liquids/stains

The **THREE** main types of finishes are...

Physical Finishes

Chemical Finishes

Biological Finishes

Physical Finishes

The **THREE** main types of **PHYSICAL** finishes are...

Calendering

Laminating

Brushing

Calendering: When finishing fabrics using the calendering process fabrics are laid out and are moved through heated rollers. The appearance and texture of the fabric then becomes very smooth. This process is generally applied to fabrics such as Cotton and Wool.

Laminating: Laminating fabrics use the same basic principles as laminating a piece of paper between layers of plastic. When laminating fabrics, layers are bonded (glued) together using heat. This process is normally used with fabrics such as cotton and polyester.

Brushing: When finishing fabrics using the brushing process fabrics are laid out under wire rollers. This is a similar process to Calendering except the rollers are very different. Rough wire rollers are used; when used on fabrics such as cotton, wool and polyester the texture appears fluffy and softer similar to fleece fabric. Brushing also improves the insulation properties of fabrics.

Chemical Finishes

There are several different types of **CHEMICAL** finishes...

Flame-proofing

Waterproofing

Mercerising

Shrink resistance

Crease resistance

Bleaching

Anti -static

Anti-felting

Flame-proofing: When finishing fabrics using the flame-proofing process chemicals such as propane are applied/sprayed on either yarns or fabrics. When the chemicals are applied they act as a protective shield or barrier slowing down the burning process. These chemicals can be applied to fabrics such as Cotton, Rayon and Linen. Soft furnishings, such as sofas, normally have a flame-proofing protective layer applied to them.

Waterproofing: When a waterproofing treatment is applied to a fabric they change the water repellence characteristics within those fabrics. The treatment involves a silicon chemical being sprayed over a piece of fabric. This process is normally applied to fabrics which are used for tents, shoes and clothing intended for outdoor purposes.

Mercerising: This involves fabric being placed in a solution of strong liquid called sodium hydroxide. Once the liquid is applied the fibres swell and appear shiny, durable and absorbent. This process is normally applied to cotton especially on products such as shirts.

Shrink Resistance: This chlorine chemical based finish is applied to fabrics to stop products from shrinking and allowing it to be machine washable. Care must be taken when washing Wool as it is renowned for shrinking. Chlorine is often applied to Wool to avoid shrinkage.

Crease Resistance: When a resin is applied to fabrics those products then become more crease resistant. This resin is often applied to fabrics such as linen, cotton, and rayon and has revolutionised the suit market making the modern product far more crease resistant.

Anti-Static: This type of finish involves a chemical being sprayed over the actual fabric. This process reduces the electrostatic charge and is normally applied to modern materials, synthetics and silk.

Bleaching: Is when a chemical is applied to a fabric. Although the main advantage is that it removes the natural colour within the fabric the main disadvantage is that it reduces the strength of the fabric and makes it weaker.

Anti-felting: This liquid based finish is normally applied to wool based products as it softens fibres and reduces the amount of matting.

Biological Finishes

The **TWO** main types of **BIOLOGICAL** finishes...

Bio-polishing

Bio-stoning

Bio-polishing: Is normally used on Cotton and Tencel and adds a shine to the fabric and reduces pilling. This finishing technique involves an enzyme which reacts on the fabric.

Bio-stoning: Finishing generates an old/worn look to garments and can be applied to denim (especially Jeans) and cotton. This finishing technique involves a cellulose enzyme which reacts on the fabric.