

## PROS and CONS    PROS and CONS

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**BONDED FABRICS**

Thanks to the Michigan State Extension Service for much of the information used in this leaflet.

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Self-lined garments are very common today in women's apparel. They are the result of a laminating process that adheres two layers of cloth together by means of a foam or other adhesive substance, or a layer of foam backed to a single layer of fabric.

"Bonded fabric" is the popular term for fashion materials made of a face, or outer, fabric laminated to a tricot knit backing. The alert consumer should know both the advantages and the disadvantages of this kind of fabric.

**Why bonded fabrics?**

There is economy in self-lined garments for the home sewer, as well as for the manufacturer of ready-to-wear clothes.

Laminating fabric layers together gives stability and body to light-weight, open, loosely constructed fabrics. For example, a former dress-weight fabric can be bonded to make a heavier coat-weight fabric. A fabric with a very loose weave can be made stable by bonding a backing layer to it.

- Bonded fabrics are easy to handle in stitching.
- The inside of a bonded garment is comfortable, especially if the face fabric is stiff, scratchy or irritating.
- Bonding permits wide variation in available fabrics with different constructions. For example, a delicate-looking lace can be bonded into a fabric for more serviceable use.
- Bonding contributes to wrinkle resistance.
- The backing fabric (especially foam) acts somewhat as an insulator.
- Bonding eliminates raveling of fabric edges.
- Bonding prevents the cut edges of knits from rolling.

**Limitations and problems**

The adhesive used in bonding, as well as the tricot backing fabric, can be dissolved by certain spot removers and drycleaning solvents.

The two fabric layers may separate, either partially or completely (known as delamination), sometimes giving a blistered-looking effect on the face or backing fabric.

Both face and backing fabrics may shrink excessively, even in a single washing or drycleaning, shrinking the garment a size or more out of fit.

Shrinkage may occur in drycleaning blocking or in steam pressing.

Shrinkage may be progressive; that is, the fabric shrinks more each time it's drycleaned or washed.

Shrinkage may be differential; that is, the face and lining fabrics both shrink but at different rates. One side may shrink and the other not at all. This type of shrinkage can result in a puckered or bubbled effect on the face fabric.

Some bonded fabrics stiffen after drycleaning.

The adhesive used to bond the face and backing fabric dissolves and passes through to the face fabric, sometimes appearing as very small black stains.

Off grain bonding (in the woven face fabric, the knitted face fabric or the knitted tricot backing fabric) can affect the drape of clothes out of bonded fabrics.

Although bonded fabrics are easy to stitch, the fabric weight and body add bulk in seams.

Bonded fabrics may be called "pre-lined," but this does not always eliminate the need for further lining of a garment. A straight skirt in a bonded fabric may still need a lining to prevent "seat springing." Also



raw edges may still be scratchy and irritating unless the garment is lined.

Bonding does not necessarily improve every fabric, for example, an already durable, stable wool flannel.

Bonding performs no miracles. It can bring compatible fabrics together very well but it can't bring any fabrics together with complete success.

The problems and disappointments experienced with bonded fabrics by consumers and the industry reveal the necessity for quality control. The failure rate of bonded fabrics is too high. Drycleaners have a legitimate complaint upon being blamed for shrunk or delaminated bonded fabrics when the real problem is in manufacturing. More careful determination of face and backing fabric combinations, foam adhesives and processes are essential if bonded fabrics are to be successful.

Because of these problems and limitations, manufacturers have made serious attempts to improve bonding and lamination processes. Some are now offering "guarantees" against the drawbacks as cited in the above examples.

#### **A good bonded fabric should:**

- hold up under a reasonable number of washing and/or drycleanings.
- not shrink beyond a certain acceptable limit that keeps the garment within the same size.
- not peel, pucker or bubble.
- keep its shape, drape and fabric comfort.
- not stiffen.
- not discolor or have any adhesive "strike-through" to the surface fabric.
- have the two fabric layers bonded "on grain."

Although the above standards for acceptable performance of bonded fabrics have been set, the manufacturers are only voluntarily obliged to follow them. The consumer should look for evidences of quality control on hangtags and labels, which indicate that the bonded fabric will perform satisfactorily.

Some evidences that consumers will find are hangtags and labels giving information such as the following:

#### **EXAMPLE 1**

"The bond is guaranteed against separation of the face and back in normal use for "Life Expectancy" of the garment if "Care Instructions" shown on this tag are followed, and if the registration on the back is returned in 10 days..."

#### **EXAMPLE 2**

"It is guaranteed for a period of one year from date of purchase against fabric separation in normal use, when drycleaned or laundered in accordance with the garment manufacturer's attached instructions. In the unlikely event that the face fabric and lining separate, return to our company for refund or replacement."

#### **EXAMPLE 3**

"This fabric has been continuously tested for resistance to delamination and dimensional stability (shrinkage)."

The consumer's recourse is to the company making the guarantee, which might be the fiber producer, the mill or the bonder. It usually is not the store. It is important to keep the sales slip marked with purchase date and name and address of the company making the guarantee.

Some large retail chain stores conduct their own tests and determine requirements for bonded fabrics.

#### **Consumer responsibilities in fabric care**

Follow the manufacturer's recommendation for care.

- DRY CLEAN ONLY means DRY CLEAN ONLY.
- Look for assured washability if that's what you want (read labels and hangtags).
- When hand steam-pressing bonded fabrics, use a protective press cloth.

Greater variation in fabric combinations, lighter-weight constructions and extended uses of bonded fabrics in clothing for the whole family and your home, are predicted. These predictions will likely come true if the consumer can look forward with confidence to using bonded fabrics.

#### **Cue for consumers**

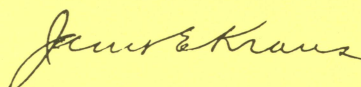
There is often a "credibility gap" between the promotion (advertising) and the performance (what really happens) of any product or fabric treatment. Unfortunately, fabric developments tend to stampede on the market, their newness creates demand, and objectionable features are likely to be overlooked, at least at first.

Products may be prematurely promoted at the expense of final consumer satisfaction. Individual and family use and care are the final test and evaluation grounds of product performance.

Use constructive complaints to alert retailers and manufacturers about poor product performance.

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