

BONDED FABRICS

Graham Hard Hazel Roberts • Fannie Brown Eaton •

What Are Bonded Fabrics?

Bonded fabrics are made of two or more already-constructed fabrics held together by wet adhesives or thin polyurethane foam. Wet bonding adhesives aid in preserving the original hand and drape of fabrics. Foam bonding adds body, shape retention and thermal qualities where needed in fabrics.

Types of Bonded Fabrics

The original bonded fabrics combined a wovenface fabric with an acetate knit liner. There are various bonded fabrics on the consumer market today. These include polyurethane foam, bonded to face fabric or between two fabrics, and wet adhesives, such as:

- Two-face fabrics bonded to make reversible fabric.
- Cotton sheeting bonded to the face fabric to serve as a stabilizer and inner lining.
- Double polished vinyl bonded to various types of fabrics for waterproofing.

*Extension clothing specialists, Texas A&M University.

Kay Elmore Joanne Thurber*

- Woven wool interlining bonded to fabric for thermal qualities, body and stability.
- Non-woven fabric bonded to woven face fabric to add bulk and warmth.
- Cotton knit backing bonded to face fabric to improve absorbency, bulk and drape.
- Nylon net backing bonded to face fabrics such as lace to add stability and retain appearance of face fabric.

Standards of Performance for Bonded Fabrics

Manufacturers of bonded fabrics and trade associations are now setting standards for performance in bond and wear as well as performance in laundering and dry cleaning.

There is a general agreement to produce quality bonded fabrics which:

- Withstand a reasonable number of washings and drycleanings.
- Have shrinkage within a certain acceptable amount.
- Do not peel, pucker, crack or bubble.
- Maintain drape and ability to breathe.
- Do not become stiff.
- Do not absorb odor.
- Will resist discoloration.
- Will have no surface evidence of adhesive.

What Bonded Fabrics Offer the Consumer

- More styling and design ideas are made possible.
- Foam bonding process increases the variety of fabrics, especially in sportswear.
- Lightweight-face fabrics, when bonded, appear as heavier, more expensive fabrics.
- Most bonded fabrics resist wrinkling and bagging, and retain a crisp, smooth appearance.
- Bonding gives stability to lightweight, loosely woven fabrics, otherwise impractical for certain end products.

3.11

- Tricot liner in bonded fabrics allows construction of garments without the need for a lining unless a more finished look, shape retention or more weight is desired in garments such as coats or jackets.
- Bonded fabrics give extra warmth without added weight.
- If a smooth liner is used, the wearer is protected against fabrics which can cause skin irritation.
- Bonded fabrics can stretch and recover, especially knit fabrics.

Problems Detected in Some Bonded Fabrics

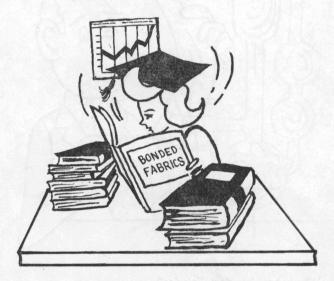
Labels – Read the label for information about the fiber content, applied finish, care instructions and the amount of shrinkage to expect. Look for the manufacturer's label with quality and performance guarantee. This label is voluntary, therefore, it is not on all fabrics.

Grainline – Before buying bonded ready-to wear or yard goods, check the grainline. Lengthwise yards should be at right angles to the crosswise ones in both the face and liner fabrics. Fabrics cannot be straightened if they are bonded off grain.

When Sewing Bonded Fabrics:

- Place pattern on face (right) side of fabric to be sure of placing pattern grain on fabric grain.
- For bulky or slightly off grain fabric, cut one thickness at a time.
- When the front facing seam is on fabric grain, the facing may be cut in one with the garment to avoid the bulk of seams.
- A firm, lightweight interfacing fabric is often needed in collars, necklines and front edges to provide support not provided by the backing.

- Use a lightweight, woven stay for buttonholes where no interfacing is used.
- Tailor's tacks or chalk are used except for lightweight fabric where tracing carbon is satisfactory.
- When basting is necessary, use pins or hand basting, as machine basting leaves marks on some fabrics.
- Use sharp, fine needles.
- Test tension and stitch length on scrap of fabric.
- Stay-stitching and seam finishing are usually not necessary.



REFERENCES

American Dyestuff Reporter – February 10, 1969 Food and Home Notes – January 6, 1969 J. C. Penney Company – Textile Newsletter – No. 3, 1969 American Fabrics – No. 78 – Spring 1968 American Fabrics – No. 83 – Summer 1969 McCall's Step-by-Step Sewing Book Forecast – For Home Economics – September 1969 Celanese Education Service – 5 Stars on the Home Sewing Scene – 1969

Cooperative Extension Work in Agriculture and Home Economics, Texas A&M University and the United States Department of Agriculture cooperating. Distributed in furtherance of the Acts of Congress of May 8, 1914, as amended, and June 30, 1914. 10M-1-70 CLO 3-2