HOME ECONOMICS GUIDE

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Fabrics for the Home

Choosing Draperies

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The consumer faces many decisions when selecting drapery fabrics. Among these are fiber content, cost, color, care and appearance.

A variety of window treatments are used in homes and apartments, but draperies continue as the leading choice. Draperies are effective window treatments because they offer privacy, are decorative, can be moderately energy saving and provide sun and/or light control. The wide variety of drapery fibers, fabrics, finishes and linings or backings provides consumers with many choices and decisions to make. Draperies represent a sizable investment and one that should last for several years. Because of this, attention to various factors such as desirable appearance over time, fabric durability, fire resistance, initial investment and recommended care add to consumer satisfaction.

Each fiber and fabric has its advantages and limitations; therefore, the consumer has to identify which factors are most important, establish priorities and be ready to make compromises. Look for a fabric that has the advantages important to you such as appearance, durability, ease of care, satisfactory cost and insulation value.

Appearance Maintenance

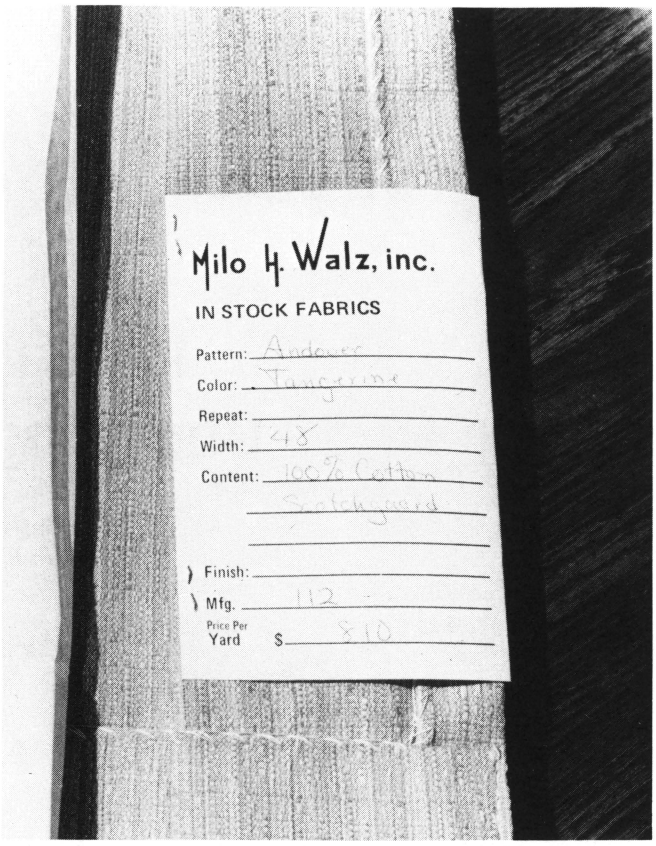
Draperies should maintain a good appearance over a period of years to give maximum satisfaction. Most draperies have a desirable appearance when new, but some maintain that appearance better than others. In general, good long-term appearance is a result of wise decision making rather than chance. Properties that contribute to extend appearance are fade resistance, water repellency, resistance to visible soil and fabric stability.

Fade resistance is important since color is frequently the primary factor in fabric selection. Sun exposure, fabric color and intensity (brightness or dullness) and whether the drapery is lined or unlined determines the rate and extent of fade. If sunlight strikes the fabric four or more hours per day, consider the exposure heavy. These fabrics need the protection of a lining, acrylic foam backing or shades to protect color life. The other alternative is to use light colored fabrics that would not have the fade potential. If sunlight is filtered through trees or there is little direct exposure, color change in most fabrics should be minimal.

Water resistant finishes protect draperies from discoloration. For locations where windows are opened and the draperies may get wet, select a water-resistant lining and/or drapery fabric to help maintain good appearance. Trademarks for water-resistant finishes include: Zepel, Scotchgard, Cravenette, Hydropuf or Sylmer. If fabrics are not washable nor treated for water resistance, a frequent problem is water spotting or rings that can be difficult or impossible to remove.

Visible soiling is a result of a combination of factors including room location, the amount of room traffic, the type of household heating system and fabric color or pattern. Kitchen and family rooms generally are high traffic areas where draperies are frequently opened and closed and subject to cooking soils. To reduce soil visibility, purchase fabrics that either can be satisfactorily washed or do not show soil readily, such as medium grayed colors or prints.

Dimensional stability or shape retention is one of the most important drapery requirements. Sagging, hiking or shrinking generally is a response to moisture in use or cleaning. *Sagging* may occur in most fabrics to a slight degree. However, the larger, more loosely fabricated and heavier the fabric the greater the opportunity for dimensional instability. Balanced weaves, with yarns of about equal size and strength, tend to sag less than unbalanced weaves. Sagging is particularly pronounced with heavy crosswise and thin lengthwise yarns. Knits and laces tend to sag more than weaves unless they are labeled heat set or permanent press. Sagging occurs more in natural fibers (cotton, linen, silk) that man-made fibers (polyester, acrylic, glass). *Shrinking* is more likely to result from washing than dry cleaning. Perhaps the best protection from the results of shrinkage is a double 5- or 6-inch hem. Double hems provide a safety measure in case of shrinkage. Most washable man-made fibers (polyester, olefins, glass) shrink very little. Some cotton fabrics are pre-



Fiber content is required on draperies. In addition, look for other special finish and care information.

shrunk or heat set, but many expensive fabrics are not. Look for shrinkage statements when purchasing either ready-made draperies or selecting drapery fabrics.

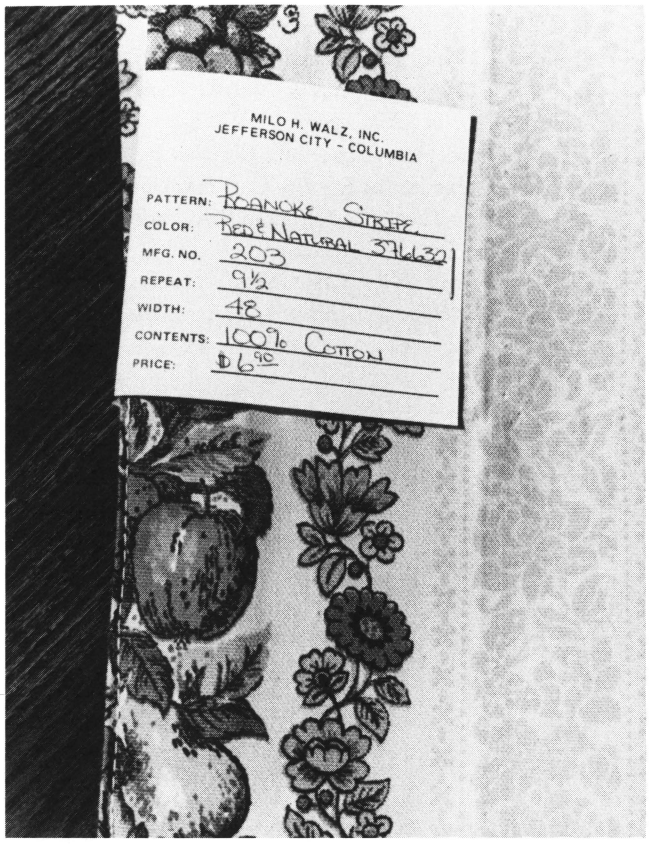
Durability

Sunlight and the combustion residues of heating and cooking are the chief factors that contribute to drapery deterioration. These factors affect fabric differently depending on the fiber used, the weight of the yarn, the balance of the weave, applied dyes and presence or absence of a lining.

Fibers react differently to light—some degrade readily, others more slowly. Not only is the kind of fiber (natural or man-made) important, but also are the color's hue, value and intensity. Bright and light colored fibers reflect the sunlight whereas dull and dark colors absorb ultraviolet rays and deteriorate. Fibers that have excellent sunlight resistance are glass, acrylic, polyester, saran and olefin; those with moderate resistance are cotton, linen, rayon and acetate; those with poor resistance include nylon and silk.

Fabrics of the same fiber composition may deteriorate at different rates because heavier yarns and close weaves tend to outlast light yarns and loosely woven fabrics. Linings preserve draperies by placing a barrier between the fabric and sunlight. Self-lined draperies do not provide this protection to the base fabric.

Airborne soil and residues from cooking and heating



Pattern repeats provide a guide for consumers in figuring yardage.

systems combine with moisture to form dilute acids that damage fabrics and fade colors. Frequently this destruction becomes noticeable in the cleaning, and the general complaint is that the fabric "went to pieces." The fault lies in the accumulation of soils rather than the cleaning process.

Recommended Care

Changes in permanent care labeling rules will require that care instructions be provided for curtains and draperies. Under separate legislation, fiber content is also required. As a result, consumers should have accurate fiber content and recommended care procedures.

Some consumers prefer draperies that do not require professional care. Consequently polyester, polyester and cotton blends, and glass are among the most frequently used fibers. Take special precautions with glass fiber fabrics; they should have a cautionary label to hand wash and line dry. *Do not machine wash or dry clean glass draperies.* If glass fabrics are washed in laundry or dry cleaning equipment, other fabrics may pick up glass fibers that can cause skin irritation.

The decision whether to dry clean draperies or not is debatable. One argument is to dry clean draperies every year so heating fumes do not accumulate and cause fiber deterioration. The opposing argument is to let draperies hang uncleaned as long as the appearance meets one's standards because the cleaning process frequently causes fabric color and texture changes. The amount of money spent for annual cleaning over a ten-year period could equal the initial or replacement drapery cost. When draperies hang uncleaned, it is desirable to periodically air and dust them. Each individual needs to make these decisions realizing the potential trade-offs.

Flame Resistance

Flame resistance is desirable for safety's sake. In public areas and institutions these characteristics are usually required by state or municipal law. In the home, fabrics used near a fireplace or kitchen range are in some danger of burning, so they should be flame resistant.

Fiber content, fabric construction and finishes all influence flame resistance. Inherent flame retardant fibers include glass, modacrylic, Cordelan matrix, Trevira 271 polyester, Kynol novoloid and Nomex aramid. In residential situations, glass fibers are the most commonly used of these. Polyester, nylon and olefin fibers flame and melt. Cotton, linen, rayon and acetate fibers, those most commonly used in residences, do burn readily. The availability of oxygen to the fabric contributes to its flammability; thin, open weaves burn rapidly; thick, heavy, firm fabrics burn slowly.

Finishes can make fabrics flame resistant. Durable finishes will last through 25 washings or dry cleanings; whereas non-durable finishes need to be restored when cleaned. Current flame resistant finishes rarely weaken, stiffen or change fabric color.

Insulation Value

Many consumers think that draperies have greater insulation value than is actually the case. Researchers have found that the method of draping material has more effect on heating and cooling than the type of materials used. If draperies are to be an effective means of reducing heat flow through windows, they must have tight closures at the center opening and around the entire outer edge of the window. According to research at the University of Georgia, heat loss can be reduced as much as 21 percent depending on how effectively openings are sealed.

In cold weather, the basic insulation problem with draperies is the circulation of air between the drapery and the window. When room air comes in contact with the cold glass, it is cooled and cascades back into the room at the bottom of the drapery. Prevent this heat loss with a cornice at the top of the draperies, by securing the sides and planning for sufficient overlap when the draperies are closed. Georgia researchers found plasticized roller shades, when sealed around the window, reduced heat loss as much as 25 percent. Therefore, on a economic basis, roller shades are more effective insulators than draperies. For further suggestions on energy control measures see Guide 2810 "Designing Interiors for Energy Control: Window Treatments".

Draperies can reduce the effects of summer heat. Three factors mainly determine drapery effectiveness—

Color of the exposed drapery back affects heat control. Light backs reflect the sunlight; dark backs absorb sunlight.

the amount of incoming solar energy reflected back at the glass, the amount of solar energy absorbed by the fabric, and the amount of solar energy transmitted through the fabric and through the openings of the weave. If draperies are tightly woven, light in color and opaque, much of the sun's rays will be reflected and less heat transmitted to the room. The use of double draperies—two layers of draperies separated by an air space—further improves the thermal performance of windows.

Sivers and Lund at South Dakota State University studied the thermal effects of heat on various types of drapery linings and backings. A separate lining or a foam self-lined backing was a better heat barrier than an unlined drapery. The greatest difference between unlined draperies was in the fabric color value; a black-backed unlined drapery absorbed 22.49 percent more heat than the white-backed unlined drapery.

In this study, self-lined draperies and draperies with separate linings had similar insulation values. Two types of self-lined draperies, acrylic foam and acetate, were tested. The acrylic foam self-lined draperies were slightly better insulators and heavier (approximately one ounce per square yard) than the woven acetate self-lined draperies. Six separate drapery linings, with variations in fiber content, fabric weave and weights were tested. There were no significant differences between the types of linings, although when a white lining was used with a black drapery there were greater thermal variations than when white linings were used with white draperies. White linings with white draperies provided the best reflectance. The acrylic foam-backed drapery, although twice as heavy per square yard, had similar insulation value to the average lined draperies used in the study.

Linings protect draperies from fading and fabric deterioration as well as provide some insulation value. The addition of a lining, whether separate or self-backing, is a better heat barrier than an unlined drapery. Because linings absorb ultraviolet rays, unlined draperies exhibit greater fabric deterioration than lined draperies.

Drapery samples courtesy of Milo H. Walz, Inc., Columbia, Mo.

Drapery Life Expectancy

The Balanced Drapery Depreciation Guide takes various factors into account and provides a realistic life expectancy for a given set of draperies. The various factors discussed above influence the anticipated wear life. Use the following two steps to estimate the expected annual depreciation of your draperies.

Balanced Drapery Depreciation Guide*

Step 1—In the table below, find the fabric composition of your drapery and circle the appropriate number.

	Unlined			Lined
	Light Weave	Medium Weave	Heavy Weave	
Cotton	17	15	12	7
Rayon	23	21	18	11
Acetate	27	25	21	13
Celaperm	20	18	15	9
Chromespun	19	17	14	8
Arnel	17	15	12	7
Nylon (Bright)	8	6	6	6
Dacron	5	4	4	4
Orlon	5	4	4	4
Saran	5	4	4	4
Fiberglass	6	5	5	5
Silk	25	23	20	12
Fiber (average)	14	12	9	6

Step 2—In each of the boxes below, write the number that corresponds to your drapery.

1. Fabric Strength (from step 1) ☐

2. Sunlight Exposure ☐

   Heavy 5
   More than two hours per day of direct sunlight

   Moderate 3
   More than one hour per day of direct sunlight

   Slight 2
   Less than one hour per day of direct sunlight

   Shaded 1
   No direct sun or reflected light. Fully protected by roof overhang, porch, etc.

3. Fuel ☐

   Electric Heat and Range 0
   Gas Heat and Range 1
   Oil Heat 2

4. Heating System ☐

   Radiant Floor or Ceiling 0
   Baseboard or Radiator 1
   Hot Air 2

5. Frequency of Cleaning ☐

   Every two years 0
   Every three years 1

Sum of factors

Percent Total Depreciation per year ☐

The sum of the five factors is the percentage of depreciation per year you may expect from your draperies.

*Balanced Drapery Depreciation Guide has been reprinted by permission of the National Association of Interior Decor Specialists, Inc. (AIDS), Arlington, Virginia.

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To simplify information, trade names and illustrations of products have been used. No endorsement of these products is intended, nor is criticism of similar products which are not mentioned.

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