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Your Furniture Selection Series

П UPHOLSTERED FURNITURE



Michigan State University Cooperative Extension Service Extension Bulletin 503 Home and Family Series



Figure 1-Companion pieces.

Today, you can select upholstered furniture from a wide range of styling. Within this wide range many pieces have part or all of the frame exposed while others are fully upholstered.

Manufacturers are giving more attention to improved styling of medium priced lines than ever before. This will help many with limited budgets have attractive and durable furniture. The important thing is to know what to look for.

Today's furniture is designed for today's houses. As a result most of it is relatively small in scale. Furniture of slimmer line is made by practically every manufacturer. Sofas are available in a variety of lengths.

You'll probably want to look for characteristics in upholstered furniture such as: Minimum bulk; good construction for price; quality of materials comparable to price; sofa of desired length; ease of use; personal comfort; versatility; beauty and durability; ease of maintenance.

Today most people are buying "companion pieces" of upholstered furniture in preference to "sets" (Figure 1).

by Glinda B. Leach Extension Specialist, University of Missouri

# П UPHOLSTERED FURNITURE

# Learn to Appreciate Quality

### THE OUTSIDE

Even though a great many important construction details in upholstered furniture are hidden, outside features can be evaluated.

# Tailorina

Good tailoring is often an indicator of good inner quality (Figure 2). The well tailored upholstered piece is usually of high quality workmanship on the inside. Inspect:

Grain. If the fabric is cut and placed correctly the weave and design will look even. That is, crosswise threads will run parallel to the bottom edge of the frame. Also, lengthwise threads will be perpendicular to the base of the frame.

Hems and Pleats. Pay careful attention to the grain of hems and pleats. Perfect grain will help them hang straight.

Pattern. Check the back as well as seats of cushions for even pattern. Fabric patterns, large or small, should be well centered for an attractive appearance.

Welting. Cording or welting should be smooth and straight as well as firmly sewn.

Cushions. Cushions should fit snugly into seat corners and adjoining cushions. Reversible cushions distribute wear.

The cushion cover should fit firmly. If the cover has a zipper closing, the zipper may or may not be designed to open. A zipper which does open probably indicates better quality.



Figure 2-Good tailoring

Outer Material. In better quality furniture the same quality of outer covering is used on all parts. That includes the areas under the cushions and across the outside back.

#### **Upholstery Coverings**

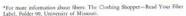
The upholstery covering contributes to your first and last impressions when you buy. Texture, color, pattern and durability all influence your decision. As a result, many stores are now featuring a wide selection in upholstery coverings. Those shown for the same piece of furniture can vary considerably in quality and price.

The upholstery covering may be woven fabric, leather or vinyl plastic.

Fabric. Learn about the fiber content of the upholstery fabric you are considering. By law, the fiber content of materials sold by the yard must be clearly stated on the label. However, already-upholstered furniture does not necessarily have to carry such a label. But a reliable dealer can help you. He should be able to determine whether or not the fiber content will contribute to characteristics such as comfort, beauty, color fastness, durability and easy care. The importance of each characteristic varies according to individual needs.

Popular fibers for upholstery fabrics include cotton, wool, linen, acetate, rayon, and nylon.\* These can be used alone or in combination. Two or more fibers are usually combined or blended for desired characteristics such as greater strength or easy care.

Upholstery fabrics should be strong and closely woven. They should be comfortable to the touch. And the appearance of the texture should be pleasing.



About upholstery fabrics: How to Upholster Overstuffed and Occasional Chairs; Circular 690, University of Missouri.



Figure 3-Vinyl plastic upholstery covering

To be sure a fabric is firmly woven, pull it both lengthwise and crosswise to see that the threads do not shift. Or scratch the fabric with your fingernail to see whether or not there are threads which might catch easily. Avoid weaves with long floating threads which might catch or pull.

Fabric Finishes. Spot and stain-resistant finishes are built-in or applied to some upholstery fabrics. Zelan and Sylmer are silicone finishes which protect fabrics against water-borne stains. These make it possible to blot water-borne stains before they penetrate the fiber. They also give an increased resistance to wear.

Scotchguard stain repeller repels oily as well as waterborne stains. It impregnates the fibers and keeps the stains from penetrating unless they are rubbed into the fabric. Even then stains are easier to remove.

Most treated fabrics are accompanied by a label telling what type of soil resistant treatment has been given.

Permanent mothproofing prevents moth damage to wool and wool blends.

Leather. Leather is an excellent but expensive upholstery. It is handsome and durable if well tailored and given proper care. More colors are available than formerly.

Vinyl Plastic. There are many grades of vinyl plastic just as there are various grades of woven fabrics. Many vinyls have interesting textures. Some are very leather-like in appearance (Figure 3). Some vinyls are breatheable in construction. These look and feel similar to cloth and are not apt to feel clammy in warm weather. "Expanded vinyl" with a thin layer of foam between the face and backing, yields extra comfort and wear.

Vinyl should be fabric backed when it is used on upholstcred furniture with springs. Vinyl without backing should be separated from foam rubber with muslin or other fabric.

Low grades of vinyl may tear at corners or split at the seams. They may also lack resistance to stains and fading. Some are likely to scuff, peel or crack.

Vinyl is easily cleaned. It is waterproof and its colors do not fade. Vinyl resists flame but does melt under excess heat. It is difficult to repair once a break appears.

#### THE INSIDE

Upholstered furniture is a "blind" product. That is, it has many hidden inner characteristics (Figure 4). These unseen characteristics will help determine durability and lasting satisfaction. Because of this it is important to buy upholstered furniture by reputable manufacturers and from reliable dealers. Ask dealers to show you illustrations of how the furniture is made. Ask about kind and quality of inner materials. Look for informational tags, Ask questions. Make comparisons of upholstered pieces.

The quality of materials and the workmanship make the big difference.

#### Frame

The frame of an upholstered piece is probably the most important factor in construction. However, it is completely concealed in fully upholstered pieces. A good wood frame must be kiln dried hardwood. It must be free from knots and imperfections which may cause warping and twisting. Well seasoned birch, elm, gum, maple, oak, and poplar are very popular woods for good quality construction. Softwoods such as pine, spruce, hemlock, and fir should be avoided.

In well made furniture, joints are double-doweled (Figure 5). Corner blocks for extra strength should be glued and fastened with screws. Sometimes you can see or feel these or metal plates at the corners from underneath. Generally, there is a lightweight fabric cover underneath the seat platform to keep out dust.

Frames can be made of metal securely joined. Light weight metals such as magnesium are being used. A complete framework of tubular steel is being used in mass produced furniture (Figure 6).

Frames that are nailed are inferior in quality and will soon loosen and come apart. Low priced upholstered pieces sometimes have frames of crating lumber nailed together.

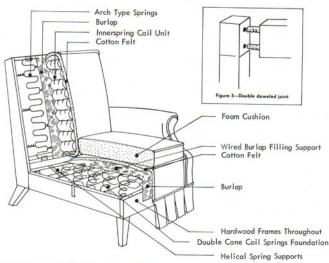


Figure 4—Inner characteristics of furniture determine durability





When buying a sofa, lift one end. The sofa should respond to the lifting with no swaying or warping along its length. Such is a good indication that the frame is well made.

#### Base

The base is sometimes called webbing or spring supports. It must be good enough in quality to support springs, cushions, and you. Spring supports are usually jute. Sometimes they are steel or rubber. Steel bands are less resilient than jute or rubber. However, they are secure and rigid. But whatever the material it should be closely interwoven. It should also be tightly stretched and securely tacked to the frame.

Webbing is not needed for springs designed to attach directly to the frame.

Wood slats should not be used as a base.

# Springs

The purpose of springs is to add resilience and to prevent sagging. They should be made of tempered carbon steel and placed closely together.

Horizontal link-type springs are often used to serve as both webbing and springs. They can be of the flat zig-zag or arched type. These can be self-supporting and their construction makes possible slimmer, lighter weight furniture. With this dual purpose spring, the expensive job of tying springs is eliminated.

Coil springs are generally attached to webbing or steel bands. In high quality furniture, springs should be tied eight times with flax twine when they are paced on jute or rubber webbing. When on steel webbing or bands they should be wire clipped.

Look for at least eight coil springs in an average size chair. Twelve springs are better. Too few springs may cause uncomfortable hollows to develop between the springs. Try to feel the springs from underneath through the dust cover.

À layer of burlap, cotton felt, or rubberized sisal should be placed over springs to separate them from the padding. This helps to support and prevent seepage of filling materials.

## **Padding and Filling**

It is required by law in many states that the label list contents of the filling used in upholstered furniture. The label is usually attached to the muslin cover of the seat platform. Kinds of padding and filling are:

Goose Down. Down has long been a favorite in the best quality furniture because of its luxurious softness. Good down or a combination of down and goose feathers is found in many expensive upholstered pieces. However, some manufacturers are now using man-made fiberfills which need no fluffing.

Rubber Foam. Rubber foam is non-allergenic and resistant to moths, mildew, and insects. It keeps its shape and is light weight and cool. Generally speaking, latex foam rubber is used in higher and medium priced furniture. It is higher in cost but is said to be more resilient, more comfortable and more durable than urethane foam.

It should be labeled indicating new, reused, or pieced.

Urethane. Vinyl foam or urethane has many characteristics of foam rubber. It is less expensive and is not affected by spot-removing solvents as is rubber. It is lighter weight than rubber. It is compatible with vinyl upholstery and is odorless.

Fabric coverings do not slip on urethane. As a result, weltings remain straight along the cushion edges. It can be bonded by heat to upholstery material.

Urethane foam is sometimes found in backing or padding while more resilient rubber foam is used for the seat and cushion.

Some upholstered pieces, such as those with exposed wood frames have only removable cushions. Many of these are rubber or urethane foam with removable covers.

Man-made Fiberfills. These are softer than rubber foam and are more rounded in shape than urethane foam. They have spring-back and are very durable. When properly constructed man-made fiberfills do not mat. As a result they need no fluffing. They resist damage by insects, mildew, dry cleaning solvents and alcohol. They are non-allergenic and odorless.

Man-made fiberfills such as Dacron polyester and Acrilan acrylic are used as complete filling or wrapping for other filling.

Rubberized or Curled Hair. Curled hair provides a smooth resilient surface. It is common in medium priced furniture. It is cool, permanently porous, non-absorbent and odor free.

Natural Hair. The main advantage of natural hair is that it remains resilient for over a long period of time. Horse hair is best. Cattle tail or hog hairs are also used. It is odorless and non-inflammable. Both curled and natural hair are sometimes covered with a top layer of cotton felt.

Moss, Kapok and Sisal. These are acceptable for special purposes or in furniture with a relatively short life expectancy.

Moss is resilient and allows air to circulate through it. However, it breaks down in a very short time and loses its resiliency. Kapok is light weight and resilient. It, too, has a tendency to break down after relatively short use. Sisal is sometimes in the pads which are used over spring units.

Cotton. A cotton felt padding is often used over other filling materials to give a firm contour and smooth surface. However, cotton may be used alone or with springs. Its chief disadvantage for these two uses is that it lacks resiliency.

In better qualities of furniture most types of filling are covered with cotton muslin attached to the frame. This is not necessary with urethane unless a loose weave upholstery fabric is used. It is not a necessity with rubber foam except when upholstery material is plastic or loose weave fabric.



# COMFORT

There is no such thing as a chair or sofa to fit every person nor is there one upholstered piece to fit every purpose. When you are selecting a seating unit for a particular purpose, it is a good idea to find one that fits its potential user (Figure 7). For maximum comfort check:

Back Support. The back of a chair or sofa should have a slight slope toward the back. It should be high enough to support your upper back. Too, it should offer some support for the lower part of your back.

Armrests. Armrests should allow your arms to rest without making your shoulders higher or lower than they should be.

Seat. Notice the angle of the seat. The sitting position should be at least a ninety degree angle at the hips and at the knees. If the angle is less than that, your knees are placed higher than your hips. Such a position causes discomfort.

Legs. Be sure that the chair or sofa legs are of the right height. The length of the legs should allow you to rest your feet on the floor as you sit.

Size. A perfectly designed chair or sofa can be the wrong size. Chairs can be misfits in width as well as depth. For instance, a chair with armerst should be the proper width for using both of them comfortably. And the depth of the seat should be slightly less than the length of your thigh.

# Additional References

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No. I, Before You Buy, Ext. Cir. 751.
No. III, Wood Furniture, Ext. Cir. 753.

### **ACKNOWLEDGMENTS**

We gratefully acknowledge permission given by the following to use photographs appearing in this circular: Baumritter Corporation, Fig. 2 and 4.

Drexel Furniture Co., Fig. 1.

House Beautiful, Fig. 7.

Karpen Division, Schnadig Corp., Fig. 6.

Kroehler Manufacturing Co., Fig. 3 and cover picture.



# YOUR COMPARISON CHECK LIST\* UPHOLSTERED FURNITURE

High Quality	Medium Quality	Low Quality
Design: Graceful lines. Harmonious : proportions. Strength and comfort. :	Design: Sometimes less graceful : lines and less harmonious : proportions, Some pieces clumsy, : :	<u>Design</u> : Curves sometimes exag- gerated. Decorative features distract attention from poor proportions.
Outer covering: Excellent quality, : beautiful color, and good design. : Well tailored. :	Outer covering: Good quality and soften good in color and design Cocasionally color and design poor.	Outer covering: Poor quality but sometimes good color and design. Often gaudy colors and pronounced pattern.
FRAME Exposed Part: Made of walnut, mahagany, teak, or other fine woods. Well finished.	FRAME  Exposed Part: May or may not be of fine woods. Sometimes of gum or other woods. Stained to look like fine woods. Good finish.	FRAME Exposed Part: Made of inexpensive woods, stained.
Covered Part: Hardwood which is strong and holds tacks well.  Joints closely fitted, dowelled, screwed and glued. Corner blocks glued and screwed. Arms reinforced with metal where they meet the seat frame.	Covered Part: Inferior grades of hardwood or better grades of softwood. Joints may be dowelled, often screwed. Corner: blocks glued and screwed or nailed. Corners of seat arms reinforced with wood strips.	Covered Part: Knotty hardwood or softwood. Joints nailed together. Sometimes screws or both added. Maybe a cheap style of dowel construction. Glue of poor quality.
Webbing: Finest quality, close to- gether and securely tacked. Used in seat, back and arms when piece is fully upholstered. No-sog spring units used.	Webbing: Medium quality not as close together. Fewer tacks. Sagless construction of steel bands or norvog springs units often used.	Webbing: Cheapest grade, for apart. Sometimes metal bands. Stout wires or wooden slats often used.
Springs: Double coil may be used in seat and back: Placed close and ited securely. No-sag spring units often used. Inner-spring unit may be in cushion. Heavy burlap covering.	Springs: Double coil often used in seat and back. Fewer used and tied with fewer knots. No-sag spring units often used. Innerspring unit may be in cushion. Firm burlap covering.	Springs: Used in seat only. Inner- spring unit may be in cushion. Burlap covering.
Filling and Padding: Goose down or combination of down and feathers. I Man-made fiber-fill. Foam rubber or curled horse hair with burlap between the layers. Sometimes urethane. Firm rolls of padding on sharp edges of frame. Best grade of cotton felt covering. Firm muslin over all.	Filling and Padding: Foam rubber or urethane. Man-made fiber fill. Curled or ubberized hair. Edge rolls often too soft to hold shape. Medium grade of cotton felt used as covering. Muslin cover less firm.	Filling and Podding: Sometimes urethane. Kapok, Sisal or moss, Edge rolls when used, made of burlap or paper. Cotton felt of poor quality. Muslin covering omitted.
Comfort: Very comfortable and soft. : Fit and support the body. :	Comfort: Comfortable as long as : materials and construction good. : :	Comfort: Uncomfortable. Hard and unyielding, the shape not fitting the body.

<sup>\*</sup>Characteristics of high, medium and low qualities will overlap. There is no sharp dividing line between adjacent qualities.

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