

# HOME ECONOMICS GUIDE



*Published by the University of Missouri-Columbia  
Extension Division  
College of Home Economics*

## Carpet Padding and Underlay

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OCT 10 1979 R

A good quality pad or cushion adds to the comfort and life of a carpet. Insist on good quality padding—it can extend carpet life 50 percent.

The industry recommends a pad costing no less than 15 percent of the carpet cost. A good carpet pad not only adds to the life of the carpet but provides comfort under foot, thermal and acoustical advantages and a safety factor in places where the young and elderly are like to fall. Because carpet pile flattens down less on a cushion, the pad also adds to the carpet's appearance.

Padding should be firm yet soft enough for comfort. Although a soft underlay is appealing it may cause leg

fatigue and a spongy sensation or instability underfoot. Over a soft underlay carpet backing may stretch and possibly break under heavy weight.

### Types Available

Although there are several types of padding, their installation is similar. Any installation differences occur between pads placed under rugs and pads placed under wall-to-wall carpeting. With rugs, pads come no more than one inch and no less than three inches from the edge of the rug. In wall-to-wall installation the pad comes about an inch and a half from all carpet edges.



*Rubberized Felt*

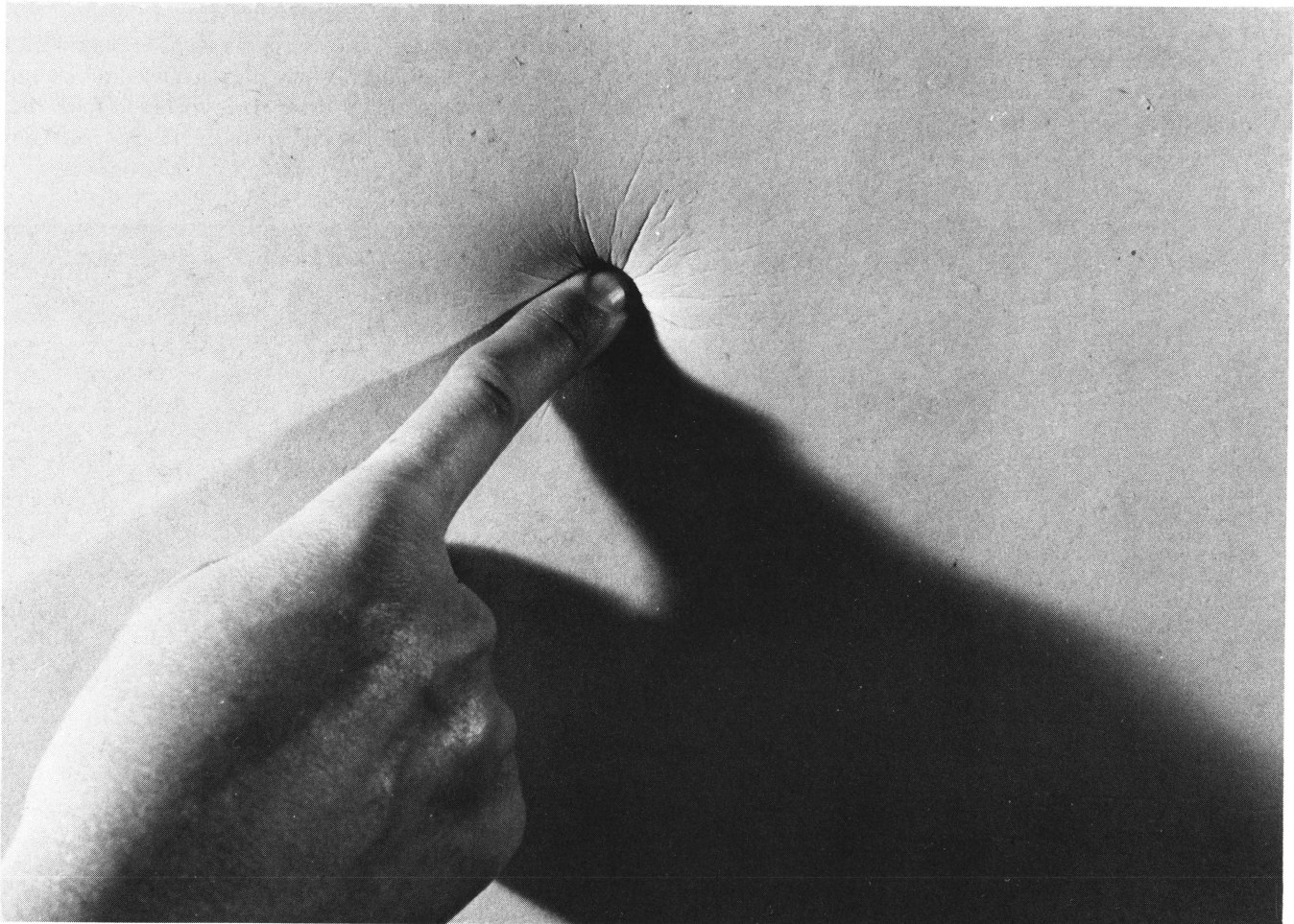
### ● Felted Pads

Felted pads may be hair, jute or a combination of the two. Hair is excellent and keeps its resiliency for life. When combined with jute, the higher the percentage of hair, the more resilient and serviceable the pad is and the more it costs. Pads made entirely of jute absorb moisture, mat and have a shorter life. The grade of hair or felt padding is determined by thickness and weight per square yard. For home use, a one-fourth to three-eighths inch thickness, ranging in weight from 32 to 86 ounces per square yard is recommended. If a pad contains hair it needs to be mothproofed. Felt pads may have a latex coating on one or both sides. The coating reduces slipping, provides some moisture barrier, prevents stretching and makes the pad non-allergenic. An embossed waffle design will help reduce skidding. This type is considered one of the strongest of the underlays. Since felted pads can mildew, do not use them on concrete slabs or in basements.

### ● Rubber Pads

Rubber pads give a luxurious feel to the carpet. They are moth, mold and mildew proof and non-allergenic. They tend to hold moisture so usually are not laid directly over concrete. (Rubber pads are easily cleaned by vacuuming or wiping with a cloth.)

The two kinds of rubber pads are foam and sponge. Sponge is a chemically blown natural and synthetic rubber and foam is a mechanically blown chemical. They are basically the same as far as performance goes. Sponge is tops in softness underfoot but foam gives more uniform support. Since sponge is the most porous of all the underlays, it retains less odor than the others. A former problem, slippage or "walking" of rugs on rubber pads has been curtailed by using a scrim or mesh backing on the rubber. Foam rubber has an acoustical advantage over other types and both sponge and foam conduct heat more readily on radiant heated floors than hair or jute.



*Foam*

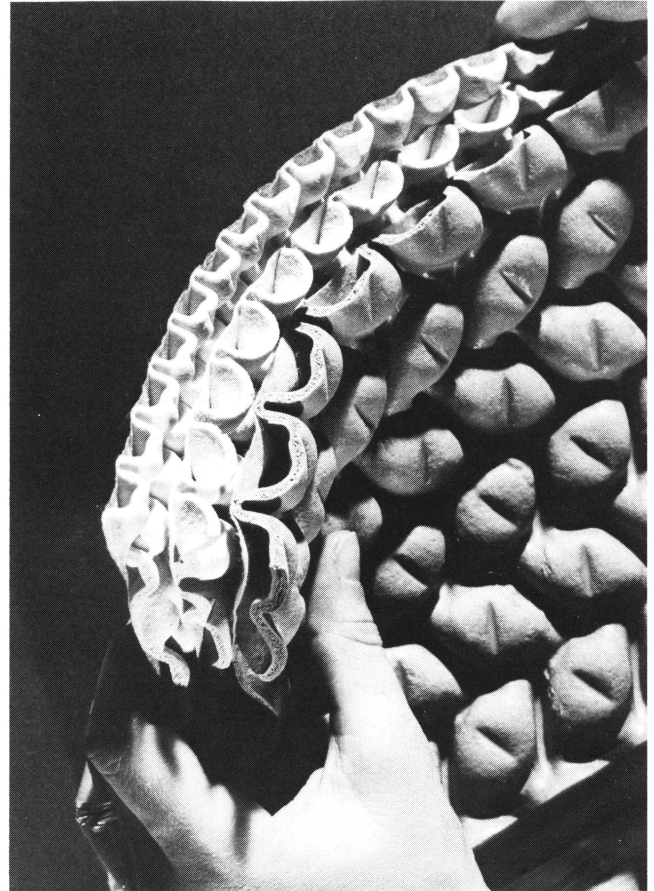
Foam or sponge cushioning is sold by weight or thickness. In choosing this type of underlay, consider the effect you want, the depth and texture of the carpet pile, the type of traffic and cleaning methods. For normal family traffic, the one-fourth inch thickness or 40 ounce weight usually gives good performance.

- **Urethane Foam Pads**

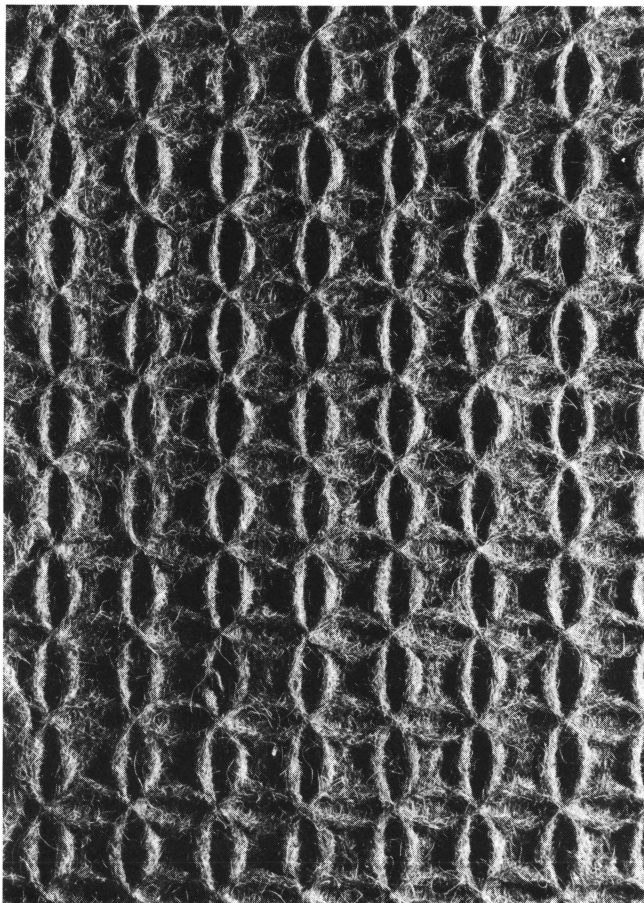
Urethane foam pads have properties similar to rubber except they have less buoyancy. In addition, they are more resistant to dampness and heat and can be used on concrete slabs and in basements. A minimum thickness of three-eighths inch is recommended for home use.

- **Pneumecel**

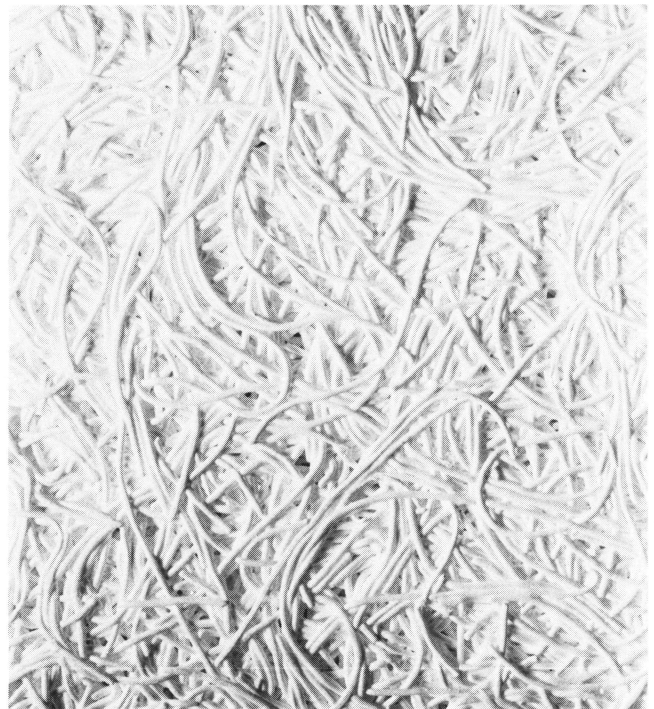
A pneumecel carpet cushion is a pressurized cellular structure chemically composed of a polyester and a fluorinated hydrocarbon inflatant bonded together with a thermoplastic, flame-retardant binder. Pneumecel has low flame-spread rate, low smoke density, resists mildew and moisture and does not absorb water. It can be used on wood or concrete floors, above, on, or



*Sponge*



*Hair Felt*



*Pneumecel*

below grade or out-of-doors. Available in two thicknesses, .30 and .48 inch, it gives firm, resilient support.

- **Resinated Synthetic Cushion**

This type of cushion is made by bonding together clean cotton and synthetic fibers with a thermosetting resin under heat and pressure. Resinated synthetic cushions are three-eighths inch thick.

- **Attached Pads**

In addition to separate pads, many carpets now have a foam cushion laminated to the carpet backing. These are usually thinner and less dense than a separate pad so they may have a shorter life and less resilience. Since laminated foam cushions are usually used on less expensive carpeting, they probably will last the life of the carpet. Cleaning is more difficult as they tend to hold moisture and take longer to dry.

If the carpet is for a kitchen or utility room, be sure there is a moisture-proof barrier between the carpet and the foam rubber. If the label fails to indicate the presence of a moisture barrier, make a test by pouring

one-fourth cup of warm water on a small spot on the sample. If water comes through, either select another carpet or provide a moisture-proof barrier.

## **Types of Installation**

Carpet installation is done in one of these two ways:

1. Carpet installed over a separate cushion. This is the best installation and generally the least costly in the long run.
2. Direct glue-down cements the carpet to the floor with or without any cushioning. Because of the variety of carpet backings and subfloors, check to see what method or adhesive the carpet manufacturer recommends. Most adhesives have excellent properties, but no one type has all the properties necessary for all the different types of installations.

## **Source of Information**

Reece, Linda E. "Buying Carpet," Extension Bulletin 409, Agriculture Extension Service, University of Minnesota.