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What's Underfoot: Carpet Pads¹

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A carpet pad is made of various materials in various thicknesses to help support and protect your carpeting. Carpet pads lay beneath carpet and are sometimes called cushions or underlays. Padding is very important to the life of the carpet for several reasons.

- Padding adds more years to the carpet by providing resiliency that protects it from damage caused by footsteps and furniture pressure. A good carpet pad can considerably increase the life of your carpet from 7 to 146 percent, according to the U.S. Bureau of Standards. Pile life increases 25 to 75 percent, and texture up to 50 percent. For the cost, it is the best protection you can buy for your carpet.
- Carpet padding helps decrease static shock, and adds to the resiliency of the carpet.
- A pad makes the carpet easier to clean with a vacuum cleaner.

Padding Materials

In general, cushions are available in urethane foam, foam rubber or sponge rubber, and felt.

Urethane Foam Pads

Prime urethane foam is made from virgin urethane and can be conventional, high-resilience, or modified urethane.

- Conventional urethane foam has no additives.
- High-resilience urethane foam has had the cell structure altered, giving it better resiliency and more comfort.
- Modified urethane contains fillers, increasing the density and load-bearing properties. It is not as strong as conventional or high-resilience prime urethane.

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Bonded or rebonded urethane foam is made of prime urethane scraps, granulated and bonded through compression and curing, and cut into a continuous sheet. Because of the construction process used, the density varies from very firm to very soft. This is the most widely used pad and it is recommended that a pad no more than 7/16 inches thick is necessary to form a good foundation for your carpet. Rebonded pads are available with a vapor barrier on one or both sides.

Rubber Pads

Foam rubber pads may be constructed of natural rubber (latex) or synthetic rubber in various weights and thicknesses. Natural rubber can deteriorate in strong sunlight. The synthetic rubber pad is more appropriate in Florida and is used primarily in commercial applications.

Sponge rubber is more porous, lighter, and softer than foam rubber. Sponge rubber is common in flat, waffled or rippled types. Most sponge or foam paddings have thin, non-woven materials bonded to the top surface, making it easier to maneuver the carpet on the pad during installation.

Felt Pads

Felt pads are available in animal hair, all jute or a combination of hair, jute and synthetic materials. A rubberized coating on one or both sides reduces shedding problems and skidding, and makes them more durable and easier to clean. Coated pads are often recommended for quality area rugs.

Carpet Installation

Carpet padding helps insulate the floor, however, the type of padding and method of installation make a difference. Research shows

that carpet with a separate cushion reduces heat loss by one-third of what it is without the pad.

Three types of carpet installations are commonly used:

1. **Carpet is placed over a separate pad.**
When a separate carpet pad is used on top of a concrete slab or below the grade, the floor should have a layer of plastic or other material, either beneath the concrete, or placed on top of the concrete to prevent moisture from seeping through the slab. Pads with vapor barriers can also be used.
2. **The cushion is attached to the carpet.**
Cushion material attached to the carpet back is often thinner and less dense than separate padding, oftentimes making it less resilient and shortening its life. This cushioning material may be sponge rubber, urethane foam or foam rubber. Carpeting with attached backing could create problems in areas where moisture exists, such as in the kitchen, bathroom or laundry areas. A good built-in moisture barrier between the backing and the face of the carpet is needed. To test this, pour 1/4 cup of warm water on the sample to see if water soaks through or remains on the surface.
3. **The carpet is glued directly to the floor.**
Gluing is often used in heavy traffic areas. Level dry floors, free of cracks, bumps, ridges, oil or grease with even temperature and humidity levels are essential for gluing indoor carpeting to the floor. Ask the retailer about future carpet applications when carpeted has been glued down.

It is essential that carpet be applied properly. Even the best carpet, poorly installed, will not live up to its full potential.

Purchasing Considerations for Florida

- Select a carpet pad that is suitable for the area. In rooms where comfort and luxury are emphasized, you might want a “bouncy” pad of heavy sponge rubber. In heavily used areas, such as a family room, select a pad that will protect the carpet but also will feel firm. For stairs, select a firm cushion to give you the best footing.
- The denser the pad, the better the carpet absorbs sound, making the area quieter.
- Initially the dollar cost for carpet and a separate cushion may be higher than carpet with padding attached. However, the total benefits from separate pieces make them as economical, or more so, than either direct glue-down or attached padding. Removing carpet that has been glued to the floor can be costly. Inquire about the cost of removing carpet before you select this installation method.
- Carpet padding should be purchased from a reliable dealer. Most sellers have their “favorite” pads. Do your homework so you will not purchase an inappropriate pad.
- Natural rubber deteriorates in strong sunlight, and therefore, is not recommended for hot, sunny Florida homes.
- Felt pads provide excellent protection for carpet in high-traffic areas, but can promote mildew, odor and carpet discoloration problems in high humidity situations, or where water problems occur. These pads can cause problems for people with allergies, and may smell musty. In Florida, the pads should only be used in structures with constantly controlled interior environments.
- Synthetic fiber cushions or pads are made from waste carpet trimmings, backings and yarn. Some carpet cushions are made from post-consumer carpet materials. Synthetic pads are more resistant to mildew and to moisture conditions.
- Urethane foam is recommended for Florida's warm, humid climate because it is mold and mildew resistant. It is also moth- and vermin-proof, odor-free, and resistant to most cleaning agents. In a sunny humid environment like Florida, the selection of an appropriate pad is important to guarantee satisfaction with your carpet.

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