CARPET

WHAT IS CARPET?

The components of a carpet system ("carpet") are cushion, adhesive, and carpet. When new wall-to-wall carpet is installed, it may be glued to the flooring and/or padding ("cushion") with adhesive. When these components are manufactured, many chemicals are used to improve certain characteristics such as stain resistance for carpet fibers and to make adhesives stickier or easier to apply.

WHAT ARE THE PROBLEMS?

When carpet is installed, vapors from some of these chemicals, known as volatile organic compounds (VOCs), are released into the air. This is called "off-gassing." The variety of VOCs emitted are primarily responsible for the odor associated with new carpet installation.

Carpet fibers and latex backing are not the only sources of VOCs, nor are VOCs the only pollutants associated with carpet. Also implicated in carpet-related pollution are adhesives used to anchor carpet to the floor, carpet fiber dyes, topical treatments such as antistatic and fire retardant agents, and fungicides and pesticides.

Most of the attention given to carpet focuses on materials that are off-gassed from new products. But older carpet also acts as a "sink" for particles as well as chemical and biological pollutants. Carpet can collect airborne pollutants, along with substances that are spilled or that may be tracked in by shoes and pets. Because carpet tends to remain damp for extended periods when it gets wet, the growth of biological organisms such as mold, mites, and bacteria is encouraged. Carpeting placed on concrete floors is more likely to develop moisture condensation and mold growth in the carpet, carpet pad, and on the concrete floor. Older carpet can contain other hazardous pollutants including lead, chlordane, and even DDT.

WHAT ARE THE HEALTH EFFECTS?

A variety of uncomfortable symptoms can be caused by emissions from new carpet. These include eye, nose and throat irritation; headaches; skin irritation; and fatigue. Some individuals may experience shortness of breath or cough. However, the likelihood of permanent or serious health effects from exposure to new carpet is small. Such effects would only be expected in people with heightened sensitivity to pollutants.

The presence of dust, mold and mildew in existing carpet is another source of health problems. Dust (small particles) stirred up from carpet can cause respiratory distress in asthma and allergy sufferers. Dust can also be a large source of exposure to lead and pesticides in children. Mold and mildew can trigger allergies and respiratory diseases in children and adults.

WHAT ARE THE SOLUTIONS?

New Carpet Installation

Vacuum your old carpet before removal to minimize the release of dust into the air. For very dirty old carpets, consider hot water or 'steam' cleaning the carpet, then removing it while still damp. Arrange with your carpet dealer

or installer to allow the new carpet to "rest" unrolled in a well-ventilated area for at least 24 hours before installation. Purchase low-emitting ("green label") carpet, cushion, and adhesives. Be sure the installer follows Carpet and Rug Institute's installation guidelines, Standard CRI-105.

Ventilate properly. If possible, open windows and/or operate exhaust fans during and after installation. If you have a ventilation system, operate it at maximum outdoor air during and after installation for at least 48 to 72 hours. Consider leaving the premises during and immediately after installation. You may wish to schedule the installation when most family members will be out of the house. Contact your retailer if objectionable odors persist.

Existing Carpet and Rugs

Regular Cleaning: You should always keep carpet clean and dry to minimize the growth of mold and mildew. It is essential that you vacuum regularly with a strong, well-functioning vacuum cleaner. A good vacuum cleaner features a strong motor or dual motors; a powerful airflow; a high-efficiency filtration and internally housed vacuum bag; and correct brush height adjustment. Vacuums with powered nozzles can pick up 2 to 6 times as much dust from carpets as those without. Most vacuums can be used with microfiltration or high efficiency bags; these capture very small particles, which can be the source of health problems especially for allergy and asthma sufferers. Use of high-efficiency bags can also reduce the need for dusting.

Vacuuming should be performed when sensitive individuals (those with allergies or asthma) are not present or when they are wearing respiratory protection. Vacuum carpets at least once a week (especially in high traffic areas) and make many passes over the same area of carpeting. Vacuums can continue to remove collected dust and dirt from the same patch of carpeting for more than 5 minutes! Also, empty vacuum bags when they are half full (or full up to the line marked on the bag). As the bag fills up, suction power of the vacuum is reduced and more dust and dirt is left in the carpeting.

Spills: To clean up spills, use nontoxic cleaners and follow manufacturer's directions carefully. For most stains, try a mild detergent mixture (1 cup water and 1/4 teaspoon mild liquid detergent, no lanolin, non-bleach), and then rinse with lukewarm tap water. Finish with a vinegar mixture (one cup white vinegar to two cups water) or an ammonia mixture (two tablespoons household ammonia to one cup water) to minimize odors. Try to dry the cleaned area as thoroughly as possible with a dry white rag or towel to minimize residual wetness. Make sure the carpet is fully dry within 24 hours after wet cleaning. When dry, vacuum the area clean.

Long-Term Care: To maintain its appearance and to remove dirt left by vacuuming, your carpet should be deep cleaned either by you or by a professional cleaning service every 12 to 18 months or before it shows soiling. Do not over-wet the carpet, and allow it to dry completely before walking on it. You can ventilate the room with fans and open windows to speed the drying process. Also, make sure to extract all soil, moisture, and cleaning agent residue from the carpet.

Rugs: Area rugs are thoroughly cleaned more easily than wall-to-wall carpet. For this reason, area rugs may be a good choice for homes (or rooms) with small children or individuals with allergies or asthma. Cleaning can be done by beating area rugs outdoors, laundering in a washing machine, having them picked up and cleaned by a rug cleaning service, or vacuuming both sides. When vacuuming both sides, vacuum the topside thoroughly making many passes over the rug. Turn rug carefully over to avoid releasing dust. Vacuuming the underside will loosen more of the dirt and dust. Vacuum up the dirt on the floor, then flip the rug upright and vacuum the topside again.

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