



Home Tips®



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Q & A

Carpet Stain Problems?

We have dark stains on our carpet along the baseboards and under some of the doors. What is causing the stains and what can we do about it?

According to DigitalAirHomescan, the odds are you have what's called carpet filtration, which is not only ugly to look at but also a symptom of poor air quality and potential problems with your heating and air conditioning system.

While carpet filtration has presumably been around as long as carpets, it's become a much more high profile problem in recent years, in part because of lighter-colored carpets and an increase in certain kinds of particulates in the air.

Here's what happens in carpet filtration: Air moves under baseboards due to air pressure differences. As the air moves through the carpet, the carpet acts like a filter, removing particles from the air that are deposited on the carpet. This also can occur under a door that's often left closed. Air coming into the room from sources like the heating and air conditioning system pressurizes the room, and air is forced under the closed door, again causing the carpet to act as a filter. Carpet filtration can occasionally happen when air is forced up through joints in the plywood subfloor, leaving a series of dark stripes.

A house operates as a complex system and various things can cause pressure differences. One cause of pressure differences is leaks in ducts. If there are leaks on either the return or the supply side, more air will either be taken from the building or supplied back to it, causing either negative or positive pressure. Exhaust fans, such as those in bathrooms and kitchens, can also create pressure imbalances, because they send inside air outside. The reduced air pressure inside the house can draw in outside air. In addition, certain kinds of temperature differences can cause air to move because of convection—hot air rises from the first floor, and in doing so goes through the first available opening, the wall-floor joint.

The fixes may include repairing leaking ducts; caulking around windows and doors; caulking the top plate in the attic; sealing around penetrations into the attic for wires or recessed lighting; and making adjustments to the duct system.

In addition to airflow problems, the other factor required for carpet filtration to show up is a source of small particulates. Most experts see air drawn into the home from unconditioned spaces like attics, crawl spaces, and wall cavities as a major culprit. Other sources of these tiny particles can be wood and gas fireplaces; gas water heaters; gas furnaces; gas pilot

lights; incense; cigarette smoke; and automobile exhaust in houses with attached garages. Trends like the current popularity of candles can also be another reason why carpet filtration has become more common. To reduce candle soot, use high quality candles and keep the wick trimmed to about a quarter inch above the wax pool. If it's the romantic lighting level you're after, try adding dimmer switches to your overhead lights and buying decorative accent electric lamps.

Remember, if you see these particles staining your carpet, they're also in the air and can affect your health, particularly if family members have asthma or other respiratory problems. The carpet filtration stains can also be a symptom of a problem that's reducing the efficiency of your heating and air conditioning system and raising your utility bills.

Source: DigitalAir Homescan (877) 419-3738

Anti-Scald Valve?

I have a newer house with a hot water problem. In the master bath, the water from the sink faucet is quite a bit hotter than the water from the shower. Is there a way to get more hot water from my shower?

Your shower is probably equipped with an anti-scald valve. Also called a pressure-balancing valve, it usually has a plastic, gear-like cap that rests just behind the handle and over the faucet stem. This "rotational stop" controls the amount of hot water that flows through the valve by limiting how far the handle can be turned in the "hot" direction.

Usually, it's very simple to change this setting. Just remove the valve handle with a hexagonal wrench or a screwdriver. For more hot water, just lift out that plastic gear, adjust it clockwise (usually) and replace it in its seat. Put the handle back on and test the temperature by feel or with a thermometer (120 degrees is considered safe). Use caution when you remove and replace the handle. It's easy to accidentally open the valve and get a face full of water.

(Most states now require anti-scald valves in all new construction and most remodeling projects)

Source: The Family Handyman February 1999

2x6 Vs 2x4 Exterior Walls?

I'm building an addition and I'm interested in energy efficiency. Would it make sense to build it with 2x6 instead of 2x4 walls so I can increase the wall insulation?

According to an Energy Efficient Building Association study, for an average home with frame construction in a cold climate like Minnesota's, 2x6 construction would yield an annual savings of \$30 compared with a similarly constructed 2x4 wall. So in Missouri, where the winters are milder, the

