

"Tek" Newsletter

Re-Occurring Spots (Wicking)

The problem of re-occurring spots, or "wicking" is not new to our industry. Problems associated with wicking have been experienced by virtually every home owner and have perplexed even the most experienced carpet cleaners. Wicking complaints probably have one of the highest rate of incidents concerning end-user dissatisfaction with carpet today, even though the carpet is a victim instead of a villain.

To understand wicking you must consider how carpet fibers dry after cleaning. This process involves the same capillary action that draws up melted wax in candles and oil in oil lamps. As the carpet dries any water present moves from the base of the fiber to the tips. It is only when this occurs that the water not removed during the cleaning

process can be released into the air by evaporation. Unfortunately, this is where the true villain rears it's ugly head as this water acts as a carrier of any unrecovered residues, which remain on the surface of the carpet when it dries. To minimize wicking when deep cleaning you must avoid over wetting. Water pressure over 150 P.S.I. will wet the carpet's backing and the pad, resulting in wicking and mildew. Less kinetic energy during cleaning provides more thorough recovery of the spent solution and quicker drying times, as well as preventing pile distortion. Minimal use of selected detergents will also reduce residue potential and avoid wicking problems. The use of synergistic presprays on heavily soiled carpets will allow for fewer solution passes during cleaning-another preventative measure. Finally, an increased number of vacuuming passes should be used to expedite drying times, particularly in environments with poor ventilation and/or high humidity.

Another source of wicking is from liquid spills that penetrate through the carpet's pile to the backing. Here we are met with another dilemma. Because today's backings are manufactured using naturally non-absorbent polypropylene these spills continue through the backing to the pad and subfloor where they spread. Improper spotting procedures only worsen this condition and explain why when a spot reappears it is usually larger than before. To avoid wicking when spot cleaning, treat the spots promptly. After blotting the spot, place a weighted layer of colorfast towels 1/2" thick on top of the spot and leave the towel overnight. This will allow the remaining residues to wick up from the carpet fibers into the towel. Another option is to follow spot cleaning with absorbent powders, brush the powders into the affected area with your hand or a soft bristle brush, allow 45 minutes to dry, and then vacuum the spot thoroughly.

Next is the issue of compound spills such as

foods and condiments that are both water based and oil based (e.g. mayonnaise and salad oil). Many cleaners are not designed to provide both hydrophilic and lipophilic solubility. While much of the spill is removed using conventional spotters, the oil left behind will wick to the surface to attract new soil. The use of a detergent followed by a solvent, or a commercially available spotter containing a solvent and detergent system will be required.

Certain fibers are more prone to wicking. Because of the naturally hydrophobic nature of olefin and polyester much of the cleaning solution slides down the fiber into the carpet's backing. Wool, on the other hand, absorbs up to 30% of it's weight in water. In both cases the end result is slower drying times that lead to wicking.

Some carpet constructions are more prone to wicking. Knobbly sisals and berbers are often difficult to get even contact of the vacuum slot of the floor tool during cleaning, resulting in floor tool chatter. Because of this, when vacuuming you can lose 25-30% of your air movement. To reduce floor tool chatter, cleaners have to adjust the angle they are cleaning to 45-90 degrees of the carpet texture, as well as provide additional dry vacuuming strokes.

An end-user's satisfaction with their carpet stems largely from their ability to maintain it's appearance. In most cases when claims arise from wicking the end-user simply wants to know the correct method for cleaning their carpet. Conversely, frustrations arise and in the eyes of the end-user the carpet becomes suspect only when incorrect cleaning recommendations are given or improper cleaning agents and methods are employed and spots re-occur. By understanding how wicking occurs and by using proper techniques complaints of this nature can be avoided.

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