## "Tek" Newsletter

## Beaulieu Residential

## Water Damaged Carpet

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When carpet is exposed to excessive wettings such as leaking pipes, heavy rainfall, backed-up sewers, and faulty appliances, the amount of damage to the carpet will depend on many factors including the length of time the carpet remained wet, the source of water, the degree of traffic the carpet received, and the procedures used to dry it.

Although certain studies of tufted carpet with a laminated secondary backing indicate that latex backcoats (SBR rubber) on indoor carpets are capable of loosing 50% or more of their laminate strength when immersed in water for 24 hours, approximately 80% of the original laminate strength can be regained when the carpet is properly dried. However, it is fair to say that the longer a carpet stays wet, the greater the potential for permanent loss of structural integrity. In addition, any traffic on a carpet while wet will almost certainly lead to delamination of the secondary backing.

In order to determine if a carpet is reusable after it has been flooded, it is important to check the laminate strength between the primary and secondary backing. If it separates easily it will likely delaminate with continued use.

Carpet that has remained wet for more than a day may trap moisture below the carpet, which is a potential source of microbial contamination. Combined with organic matter carpet offers a favorable medium for growth of mold and related discoloration once it begins to dry. This can only be prevented if the carpet is treated early with a mildewcide. Treatment after mildew growth has occurred will inhibit further growth: however, the use of hot fogging equipment with high strength deodorizers may be required to curtail musty mildew odors that may develop in damp climates.

Prolonged wettings also can lead to dye transfer with liquid dyed carpets. To test for dry transfer, press a clean white cloth or tissue against the wet carpet and hold it there for several seconds. If dye transfer occurs it will be virtually impossible to remove

it if the dye comes in contact with other fibers or materials. Sticky soil attracting detergent residues left by leaky or overflowing dishwashers and washing machines can be a major concern. Another potential problem is shrinkage. If the carpet is not firmly secured to the floor, it is not uncommon for it to shrink in both length and width once it has been flooded as it begins to dry.

The final concern is the potential for stainings. Staining similar to bathtub rings can occur from groundwater contaminants and from soils that were not removed by daily vacuuming. Stains which are generally removed under normal conditions can become permanent when allowed to remain under wet conditions for extended periods. Hot water extraction cleaning of the carpet while it is still wet is recommended when staining is evident.

When a carpet is exposed to excessive wettings the first step is to remove as much water as possible from the carpet while it is still in place. Even if staining is not evident

this process should be attempted by using hot water extraction equipment. Emphasis should be placed on airflow and ventilation throughout the water extraction process, since drying only occurs when moist air is replaced by dry air. This can be accomplished by placing fans around the perimeter of the room, by using a dehumidifier, and by using high velocity dryers; however, caution must be emphasized when using electrical equipment around wet carpet to prevent shock.

After vacuuming the bulk of the water it is often necessary to remove the carpet and the pad from the room and lay them separately in a relaxed position in a clean, dry area. Care must be taken to avoid bending and flexing the carpet during this process in order to avoid delamination. If the carpet is installed direct glue down it can often be dried in place provided the latex backcoat and floor adhesive have not been compromised. The use of a heavy roller can be used to assist in water removal.

In almost all cases the techniques required to restore carpet that has been exposed to excessive wettings are beyond the scope of the average individual and should only be attempted by trained and certified professional cleaners familiar with these procedures. Although proper restoration procedures may restore wet carpet for reuse, in many

circumstances the manufacturer cannot determine the degree of damage done to the carpet or how it will perform with continued use. Because of this manufacturing warranties may also be compromised.

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