

ODORS

Odor is sort of like beauty; it is in the nose of the beholder. Some people are overcome by an odor that another person cannot smell. Some people *think* they should smell something, so they do. Other times the odor is quite pronounced. Most odors are 'free radicals' or incomplete molecules. The majority of the odor control products we use also contain 'free radicals'. These products bind with the odor molecules. When they bind, they create a complete molecule and it neutralizes the offending odor. The key to odor removal is to get rid of the source of the odor. We can treat for a musty odor, but if there is an unknown water intrusion where mold is growing, it will not work. Some odors can be so severe that odor treatment is not enough. It can be so bad that the walls, carpet, HVAC system and furniture must be replaced.

Odors can be broken down into 6 categories: tobacco odors, pet odors (including urine), molds (musty), rotting organic material, fire and other.

Tobacco odors can be difficult to get rid of as the smoke is very small and it penetrates into everything, including walls and ceiling. Merely cleaning the carpets will not get rid of it. Depending on the severity, getting rid of it could include wiping the walls with fire sponges and fogging the unit, including duct work, with an antiseptic antimicrobial product. Usually this entails no one being allowed in the unit for up to 48 hours. Our ULV (Ultra Low Volume) fogger delivers fog at 3 microns. This allows it to penetrate the walls and ceiling, neutralizing the odor from the inside out. Some firms use Ozone machines to solve tobacco odor problems. Ozone machines create O³, and it poses a serious health hazard to anyone exposed to it. For that reason we do not use them.

Pet odors are usually resolved by cleaning the contaminated surfaces and using a deodorizer spray. Severe pet urine problems may need more treatment, up to and including removal of contaminated cushion (pad), treatment of the subfloor, cleaning both sides of the carpet and reinstalling the carpet over new cushion.

As urine dries, it turns into an alkaline salt. The salts attracts moisture. As it absorbs the moisture in the air, it gives off the familiar urine odor. When you step on carpet and cushion, it releases a cloud of odor. You will notice urine odors more during spring and fall seasons. During spring and fall, most HVAC systems are off or operating infrequently. This tends to raise the relative humidity, providing the necessary moisture to trigger the urine odors.

Mold or musty odors are caused by active microbial growth. To eliminate them, remove the moisture source. When eliminated, the molds will go dormant. Air movement will help prevent reoccurrence. If there has not been a water intrusion that is known, check the air handling system for mold or walls and ceilings for possible leaks. See the Molds flyer for more information.

Rotting organic material (such as dead animals in an attic) must be removed before one can address the odor issue. Usually contaminated materials must be removed as well, such as Sheetrock and insulation and floor covering. An antiseptic antimicrobial spray or fogging will help remove the residual odors.

Fire odors range from mild to severe. Of course, fire damaged materials should be removed before attempting the removal of odors. Incomplete combustion leaves huge amounts of "free radical" compounds that are both visible (soot) and invisible. Fire heats everything near it, which causes materials to expand. The residues get in these materials, and when cooled, they shrink, trapping the residues inside. Thermal fogging, at up to 1200° , opens the materials and treats the trapped residues. Ozone is frequently called for in removing remaining odors as Ozone machines can be left on for days.

Other odors can be dealt with absorbing crystals, sprays or light fogging, depending on the source and severity. Cleaning the carpet may also resolve the problem, as carpet acts like a filter for the building. It traps pollens, dust, soils and other odor sources. Cleaning the carpets often removes these odor sources.