



410-692-9775

The DUCTZ (of the Upper Bay Region)
Experience



A Brief Overview of how
DUCTZ Cleans a Heating
and Cooling System

System Inspection and Quotation



We Always begin with an inspection of the system, and a good count of the duct to be cleaned to provide a “no surprises” quotation.



We Check all trunk lines and branch lines using digital cameras

Inspect the inside of their handler unit, the blower and the coil as well to determine the method of cleaning required

Process Sequence



Location Preparation



Technicians bring a door mat, and will use shoe covers, and drop cloths to protect your flooring.

Corner Guards are put into place to protect walls and stairways

Any valuable or breakable items are relocated from the work areas

Respecting your home
is part of our Total
Care methodology



Creating Access into the Ducts



Access ports are cut into the supply and return sides of the system so that the HEPA filtered negative air collection unit may be connected. These access holes are 8" to 12" in diameter and will be properly sealed upon completion.

Smaller access holes are cut into strategic parts of the ductwork so that mechanical brushes and air tools may be inserted into the ductwork. These access holes are 1" to 2.5" in diameter.



Clean Registers and Diffusers



Registers and diffusers must be removed to properly clean the branch lines

We HEPA vacuum loose debris off registers and diffusers

Each diffuser is hand cleaned with a disinfectant cleaner. Heavy debris may be washed off registers outside of the home using a pressure washer.



Collection of Contaminants



During cleaning, all register openings are sealed and the entire HVAC system is placed under continuous negative pressure (vacuum) to prevent the spread of contaminants.

Continuous negative pressure allows very fine particles to be removed from the system as they become airborne, ensuring that these particles are not released into the living space when the system is turned on after cleaning.

This negative pressure also serves to extract the loosened contaminants, which are collected and removed from the home.

Breaking Loose the Contaminants



Properly cleaning HVAC systems requires removing the sources of contamination. Source removal begins with use of one or more agitation devices designed to loosen contaminants from the surfaces within the heating and air-conditioning system.

Examples of agitation devices include cable driven brushes, air whips, and compressed air nozzles or "skipper balls." Agitation can also be achieved through hand-brushing or contact vacuuming, or even sometimes hand wiping.

Mechanical Brushing System



Brushes are selected based on the type of duct material. Silica Carbide brushes are the most aggressive method to agitate dirt and debris, but are only suitable for metal duct. Nylon brushes are selected for some metal ducts, and soft nylon brushes may be used on flexible mylar duct branches. Fiberglass lined ducts may require hand vacuuming.

Driven by power drills

Air Wash System and Tools



After mechanical brushing is complete, the Viper Rod system uses compressed air to mechanically agitate all surfaces of the ductwork, dislodging any remaining debris and pushing heavier contaminants toward the collection vacuum flow

Air washing/whipping alone (without the use of brushes) is not as effective as using both techniques in combination

Clean the Air Handler, Blower



Remove the panel and use a HEPA filtered vacuum to remove debris from inside the unit. If debris on the blower is light and loose, we use HEPA filtered vacuum and compressed air to remove it (included in our basic service).

When the debris on the blower wheel is significantly caked on, we remove the blower assembly and disassemble the components for pressure washing, or chemically cleaning.



This blower wheel required pressure washing

Clean the Coil



We Use a HEPA filtered vacuum to contact vacuum and compressed air to remove debris off of the coil when the debris is light and loose (often the case when good quality filtration is in place) – included in our basic service package

When the coil is completely compacted with dirt, debris and microbial growth, the coil is cleaned with an appropriate PH balanced chemical coil cleaner and well rinsed with clean water (called a Type-2 cleaning)



This coil required Type-2 cleaning

Important to Know



If you do not clean the inside of the air handler unit, the blower and the coil, it doesn't matter how clean you make the ductwork. Full system cleanliness is not achieved until all components of the system are cleaned.



So, beware of duct cleaners who only clean your ducts...the entire system needs to be cleaned to get the benefit of clean air

Seal Access Points



The Larger holes (where the negative air machine is attached to the duct) are sealed with sheet metal patches, zip screws and foil tape according to ACCA and SMACNA protocols.

Small holes used for brush and air tool access are patched with air tight caps that are specifically made for these accesses

All access holes are sealed air tight to ensure system efficiency with no air leakage



Cleanup, You will never have to clean up after DUCTZ of the Upper Bay Region

Finally, all areas are restored to their original (if not better) condition.

Furniture (if it was moved) is restored to its original location, registers are properly re-installed, and dampers are re-set to the way we found them

All dirt, debris, metal shavings (from access ports) are swept and vacuummed up

We welcome a final walk thru to assure your satisfaction



Thank You!

Contact **DUCTZ** of the
Upper Bay Region for a free in
home assessment and quotation

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