A CLEAN AIR CONDITIONING DUCT IS NOTHING SHORT OF CRITICAL.

The current COVID-19 pandemic has increased the awareness of improving indoor air quality. It has brought into focus the spread of virus, bacteria and other pathogens in our living and working spaces and the risk they pose for employees, workers, residents and consumers. In this situation, we cannot stress enough the importance of cleaning the ducts of your air conditioning systems.
Duct cleaning eliminates bacteria and molds which form inside the ducts over a period of time. Once they enter the air conditioned space, they end up polluting the indoor air. Regular duct cleaning ensures that the occupants breathe clean and pollution-free air.

National Air Duct Cleaners Association (NADCA), the Air Conditioning Contractors of America and the US Environmental Protection Agency (EPA), recommend that the complete HVAC system should be cleaned to prevent re-contamination. This is achieved by removing the contaminants all the way from the entry of air to its exit including all internal surfaces of the airstream - air handling units, fans, coils, mixing boxes, variable air volume boxes, heat exchanges, condensate drain pans, ductwork and components in which air travels through or across.

Improves the efficiency of the complete air conditioning system, extending its life, and ultimately saving energy and money.

Prevents potential fire hazards.

Air conditioning systems control both temperature and humidity in the conditioned space. This increases human resistance to infections which is highly beneficial in the current pandemic scenario. Contrary to the general perception that it is a closed-air system, these systems are in fact well-ventilated. A standard central air conditioning system design includes a mechanical ventilation cum filtration system that draws in adequate fresh air. The system also maintains Relative Humidity between 40% and 70%, which is ideal for avoiding the spread of the Covid-19 virus.
How Duct Cleaning Works?

**STEP 1** Shaking the contaminants loose by agitation.
Removal of contaminants begins with the use of one or more agitation devices that are designed to loosen contaminants from the surfaces within the air conditioning system.

**STEP 2** Moving the contaminants down the duct with the help of negative airflow.
During cleaning, the entire HVAC system is placed under continuous negative pressure with a vacuum to prevent the spread of contaminants. This allows 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.

**STEP 3** Collecting the contaminants.
This negative pressure also serves to extract the loosened contaminants, which are then collected and removed. After dislodging the debris, the contaminants are collected properly with the help of collectors.

Often, HVAC system components collect significant amounts of debris and particulate matter during construction activities within a building. NADCA recommends that newly installed HVAC systems or HVAC systems undergoing renovation be verified clean and protected, before the system is permitted to operate.

Duct Cleaning Process - Collecting the contaminants
ADVANTAGE OF DUCT CLEANING AT BLUE STAR

Blue Star is a certified member of NADCA. Thus, strict guidelines and standards set by NADCA are followed by us for all our services. Our Air System Cleaning Specialist (ASCS), certified by NADCA, renders efficient service every single time regardless of the complexity of the project. Our service technicians have immense knowledge of the tools and tackles. They use equipment ranging from the widest range of brushes, innovative brush adapters and gears to achieve the best results, all in line with NADCA's standards.

STRENGTHS OF THE DUCT CLEANING SYSTEM AT BLUE STAR

1. Compact
2. Portable
3. Quiet and quick operation
4. Remote controlled
5. Displays the condition on a monitor
6. Works on a system of blow and vacuum
7. Offers video recording
8. Easy access to corners and joints in a duct
9. Provides clean air discharge
Duct cleaning should be done on a regular basis. Removing the accumulated dirt and dust inside the ducts periodically will help to eliminate contamination.

Clean the grilles and diffusers regularly.

**Robotic HVAC Duct Cleaning:** The HVAC ducts are inspected and decontaminated using the robotic system ensuring maximum efficiency.

**Disinfection:** We use a Hydrogen Peroxide (H₂O₂) based chemical to disinfect the facility after the duct cleaning activity thereby killing all the unseen viruses, bacteria, fungi and other pathogens in the facility. This chemical releases nascent oxygen which will kill all of them resulting in a safe and healthy space. The area should not be used for 3 to 4 hours after the application of the chemical.

**WE RECOMMEND THE FOLLOWING ADDITIONAL STEPS FOR REGULAR MAINTENANCE TO COMBAT FURTHER RISK:**

Duct cleaning should be done on a regular basis. Removing the accumulated dirt and dust inside the ducts periodically will help to eliminate contamination.

Clean the grilles and diffusers regularly.
Clean filters in all IDUs at regular frequency using 5% Cresol solution (containing 50% Cresol and 50% liquid soap solution).

Condensate drain pans, cooling and heating coils must be cleaned regularly.

Louvers on toilet doors which are designed as part of exhaust systems need to be cleaned regularly.

Frequently sanitise various items including switches and panel handles. As the same may be touched and operated by human hands.

In the current COVID-19 pandemic, hospitals are the most important spaces. It is critical that every hospital provides clean air for all the patients, doctors, nurses and other staff. Our expert duct cleaning services clear all contaminants at regular intervals thereby ensuring the environment necessary for the speedy recovery of the inmates and for safeguarding the health of the staff. A thorough duct cleaning is also needed in the hotels which are used as quarantine facilities in this pandemic period. Apart from these, Blue Star's duct cleaning expertise also helps in the pharmaceutical industry where pure and clean air is required to manufacture and sell medicines. In IT companies a perfectly air conditioned system is required to avoid any dust collection that can cause a lot of damage to computer hardware and peripherals. Even in any manufacturing facility, invisible dust particles floating around in the atmosphere can come from the air conditioning system and interfere with the production or manufacturing process. Blue Star's duct cleaning services ensure that the air ducts are maintained and cleaned so that it does not pollute the working space in the factory in any way.

Please reach out to our team for any support during these challenging times:
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