

Response to White Paper 'Effects of Negative Air Duct Cleaning on Flex Ducting'

I have been in the HVAC industry for over 20 years. Along the way I have installed, replaced, and cleaned thousands of feet of flex duct. The 2021 edition of ACR, the NADCA Standard, provides the “how to” and guidelines on best practices for the assessment, cleaning and restoration processes related to HVAC systems and their components.

My knowledge of ACR, The NADCA Standard, coupled with my years of experience has led me to write this response to the recently published white paper, *Effects of Negative Air Duct Cleaning on Flex Ducting*, to dispel the narrative that negative air equipment can't be used in the cleaning and restoration of flex ducts.

In the assessment of a flex duct system, it would be evaluated on its age, durability, and the methods available to the technician when determining if a flex duct is able to be cleaned or if it's in need of replacement.

According to ACR, The NADCA Standard, section 1.10 **System Component Assessment:**

Information collected from the HVAC inspection shall be documented and evaluated to assess the condition of the HVAC system components at the time of the inspection. The assessment shall include a recommendation on the need for cleaning, a clearly defined scope of work for the cleaning and restoration project, recommended cleaning techniques, a determination of the environmental engineering controls required for the workspace, and any unique requirements.

Properly trained technicians would complete this assessment of the flex duct upfront and advise the client on the realities of cleaning.

Once it has been determined that cleaning is the best route, a NADCA-certified ASCS technician would select the proper tools to perform the job. In some cases, the best method may be to remove the flex duct and contact clean using a portable HEPA vacuum. If the flex duct is made of a stronger nylon material, found in most commercial building settings, a certified technician may determine that soft rotary brushes in conjunction with negative air pressure (possible sources may be portable HEPA vacuums ranging from 1500 – 5000 cfm or a truck mounted unit) may be the best method for cleaning and restoring the flex system.

ACR, The NADCA Standard states in section **4.2.9 Flexible Duct Systems:**

Service openings shall not be made in flexible ductwork.

This statement should lead a trained and certified duct cleaner to source sheet metal access points close to the flex duct to hook up a negative air machine, minimizing the potential for damage and taking the stress off the flex duct.

In closing, it is misleading and in poor judgement to simply state that flex ducts cannot be cleaned using negative air. This would be something that could only be determined after a **proper** assessment is conducted and such a general statement cannot and should not be applied to all jobs before an assessment takes place.

Experience, training, certification, and knowledge of ACR, The NADCA Standard for the assessment, cleaning and restoration of HVAC systems (and their components) will lead a technician and their clients in the right direction when it comes to maintaining their HVAC system—and this may include cleaning methods utilizing negative air.

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