

FAX

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Page number : This header note + 4

Sophia Antipolis 27/07/1999

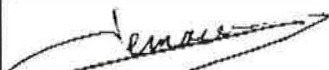
Subject : Duct cleaning annotated bibliography

Dear Mark,

I run through the annotated bibliography. It seems that a few documents which are particularly relevant are not referenced :

- standard CEN EN 12097 : I don't know the exact title in English, something like "How to design ducts in order to facilitate the maintenance"
- Save Duct Report
- Documents from NADCA (National Air Duct Cleaners Association) see attached.

Best regards.



Marie-Claude LEMAIRE

Handwritten notes in blue ink: "25", "order ref", "123666", "VAREZAK"

NADCA Standard 01-1992, Mechanical Cleaning of Non-Porous Air Conveyance System Components - Defines acceptable cleanliness levels after cleaning. The standard provides two methods of verifying cleaning effectiveness and specifies general requirements related to occupant health and safety, equipment, and other areas of cleaning. (Pub# NAD-01)

Template - NADCA Standard 01 defines a test, the NADCA Vacuum Test, for determining cleanliness. One of several tools needed to perform the procedure is this plastic template. (Pub# NAD-01A)

NADCA Standard 05-1997, Requirements for the Installation of Service Openings in HVAC Systems - Defines procedures and methods for creating and closing access openings into HVAC systems for cleaning and inspection. (Pub# NAD-05)

NADCA General Specifications for the Cleaning of Commercial HVAC Systems - This detailed "generic" specification is designed for engineers and project managers to modify to suit a specific cleaning project. (Pub# NAD-06)

1998-1999 NADCA Buyer's Guide - A complete reference source for purchasers of air duct cleaning equipment, this guide is broken down into more than 25 categories of equipment type. (Pub# NAD-10)

Understanding Microbial Contamination in HVAC Systems - Explores investigation, testing, and remedial action for microbiological pollutants in HVAC systems. (Pub# NAD-11)

Introduction to HVAC System Cleaning Services - A comprehensive overview of HVAC system cleaning. Chapters include contaminants, indoor air quality, site preparation, equipment, chemicals, safety, and much more. (Pub# NAD-12)

DuctTalk Magazine - NADCA's bi-monthly magazine is filled with articles about HVAC cleaning, IAQ, industry news, association news, and business information for contractors. (Pub# NAD-13)

Confined Spaces Assessment Guidelines for the Occupational Safety and Health Administration's Confined Spaces Standard 29 C.F.R. § 1910.146. (Pub #NAD-14).

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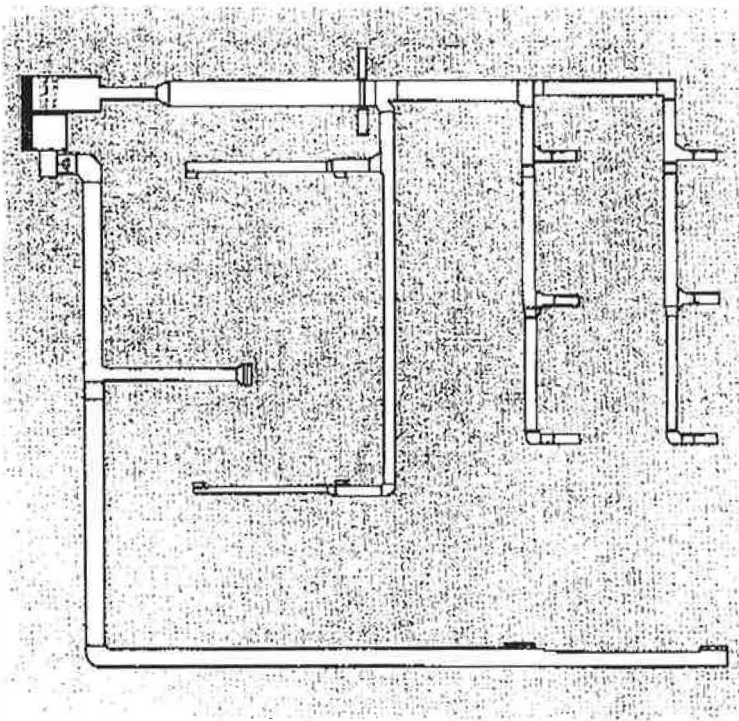
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RETURN THIS FORM BY FAX OR MAIL TO:
National Air Duct Cleaners Association

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NADCA General Specifications for the Cleaning of Commercial Heating, Ventilating & Air Conditioning Systems



This General Specification describes the minimum requirements necessary for commercial HVAC system cleaning. This document must be modified to accurately account for the unique system variations within an individual building.

NADCA

National Air Duct Cleaners Association
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E-mail: nadca@aol.com
Website: www.nadca.com

experienced in testing of this nature.

4. Cleanliness verification shall be performed immediately after mechanical cleaning and before the HVAC system is restored to normal operation.

(D) Verification of Coil Cleaning

1. Cleaning must restore the coil pressure drop to within 10 percent of the pressure drop measured when the coil was first installed. If the original pressure drop is not known, the coil will be considered clean only if the coil is free of foreign matter and chemical residue, based on a thorough visual inspection (see NADCA Standards).

2.07 Pre-Existing System Damage

(A) Contractor is not responsible for problems resulting from prior inappropriate or careless cleaning techniques of others.

2.08 Post-Project Report

(A) At the conclusion of the project, the Contractor shall provide a report to the owner indicating the following:

1. Success of the cleaning project, as verified through visual inspection and/or gravimetric analysis.
2. Areas of the system found to be damaged and/or in need of repair.

2.09 Applicable Standards and Publications -- The following current standards and publications of the issues currently in effect form a part of this specification to the extent indicated by any reference thereto:

(A) National Air Duct Cleaners Association (NADCA): NADCA 1992-01, "Mechanical Cleaning of Non-Porous Air Conveyance System Components," 1992

(B) National Air Duct Cleaners Association (NADCA): "Understanding Microbial Contamination in HVAC Systems," 1996.

(C) National Air Duct Cleaners Association (NADCA): "Introduction to HVAC System Cleaning Services," 1995.

(D) National Air Duct Cleaners Association (NADCA) NADCA Standard 05 "Requirements for the Installation of Service Openings in HVAC Systems," 1997.

(E) Underwriters' Laboratories (UL): UL Standard 181

This General Specification describes the minimum requirements necessary for commercial HVAC system cleaning. This document must be modified to accurately account for the unique system variations within an individual building.

(F) American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE): Standard 62-89, "Ventilation for Acceptable Indoor Air Quality"

(G) Environmental Protection Agency (EPA): "Building Air Quality" December, 1991

(H) Sheet Metal and Air Conditioning Contractors' National Association (SMACNA): "HVAC Duct Construction Standards - Metal and Flexible," 1985

(I) North American Insulation Manufacturers Association (NAIMA): "Cleaning Fibrous Glass Insulated Air Duct Systems." 1993