

Codes of Practice

As with any industry, workers in the HVAC industry must adhere to a number of codes of practice in order to ensure the work they are undertaking is safe and to the required standard.

This document takes a brief look at a number of the more important codes of practice.

DW/143 – Ductwork Leakage Testing

A guide that outlines the procedures necessary for testing ducts for conformity with air leakage limits. It details where the responsibility for air leakage lies: the drawing office, the factory and the on-site ductwork installers. It goes into specific detail for each of these three categories but specifically for installers it talks about proper use of a test rig, provides a detailed plan of how to use the equipment, how to prepare for testing and why it is important to undertake preliminary testing.

DW/144 – Sheet Metal Ductwork

This document is the benchmark against which the quality of ductwork manufacture and installation can be measured. The latest version of the document includes provision for reducing the thickness of the sheet metal used in some sizes of rectangular ductwork which results in environmental, resource efficiency and competitive benefits. Some of the areas covered in the DW/144 include:

- Application
- Materials
- Technical information provided by the system designer to the ductwork contractor
- Rectangular ducts
- Circular ducts
- Flat oval ducts
- Hangers and supports
- General ductwork related information e.g., dampers, kitchen ventilation and external ductwork

Manufacturing techniques are constantly evolving so where their recommendations differ to those in the DW/144, the manufacturer's recommendations should take precedence.

DW/145 – Installation of Fire and Smoke Dampers

The DW/145 looks at the journey of installing fire and smoke dampers from start to finish.

It begins by discussing project-specific certified sketches, based on manufacturer's methods, that show the complete installation. Illustrations are provided in the documents, showing the majority of installation arrangements used in the UK.

The document goes on to look at the information that should be provided to the damper installer, the sequence of installation and the considerations that must be made, such as on-site modifications, work-in-progress inspections and pre-handover activities.

It ends by looking at the final inspection and certification process, all of which must be documented in a handover register, to be retained by the members of the team responsible for the system design and installation.

A typical Inspection and Handover Check List is provided in the DW/145.

TR/19 – Internal Cleanliness of Ventilation Systems

First published by the HVCA in 1998 (as the TR/17), the TR/19, published in 2005, is the third edition of the guide and incorporates best practice improvements as well as the former HVCA publication, DW/TM2 (Internal Cleanliness of New Ductwork Installations).

The guide can be used for new build, upgrade, and maintenance of ventilation systems.

It is structured as follows:

- Standards for maintaining internal cleanliness of ductwork
- Design & access to internal system surfaces
- System components
- System testing
- Cleaning methods
- Kitchen extract considerations
- Hazardous contamination
- Cleanliness verification
- Health & safety

Following these guidelines will ensure new ductwork systems remain protected during the installation period and prior to commissioning. They also place a responsibility on the designer to clearly state if verifiable cleanliness is required for newly installed ductwork.

The guide covers:

General Ventilation Systems	Kitchen Extract Systems
Ductwork	Canopy/extract plenum
Air handling units	Canopy
Fan coil & induction units	Ductwork
Constant air volume units	Fans
Variable air volume units	Plant & ancillaries associated with extract system
Control dampers	Systems that may be affected by grease/oil etc
Attenuators	Fire dampers & attenuators
Air terminals	
Plant & ancillaries associated with air distribution	

NAAD21

NAAD 21 is a code of practise for inspecting and cleaning commercial ventilation systems. It has been developed by the National Association of Air Duct Specialists UK to offer information, advice and guidance to the industry. It was originally set for release in April 2020, however, was postponed due the COVID-19 pandemic. Its new release date has now been set for some time in 2021.