

Cleaning ventilation ducts: how to carry out such work

Cleaning ventilation ducts is a very important event, which is aimed at removing human waste products from ventilation communication. Various contaminants, regardless of the type of ventilation, accumulate in the pipes during operation. For convenience, when cleaning the ventilation duct, it is recommended to install special inspection hatches. In addition, such hatches also perform other functions (for example, through them, the state of the air duct is monitored).

The [air duct cleaning new jersey](#) is a necessary measure to keep the system in working order

Why do you need to clean ventilation systems?

One way or another, over time, human waste products, dirt, dust, etc. accumulate in the ventilation pipelines. A contaminated air pipe is less productive from an operational point of view, since foreign deposits on the inner walls of the channel reduce the ventilation capacity. Let us consider other problems that arise during the operation of a contaminated ventilation structure:

- increased risk of communication fire. Dust that is deposited in the air ducts is usually dry and only one spark is enough to ignite it;
- non-compliance with sanitary and hygienic standards;
- in polluted communications, the likelihood of failure of such elements as: fans, air conditioners increases;
- a contaminated system through which air moves into living or working premises is the cause of a poor microclimate;
- the risk of illness among residents or staff increases.

Useful information! *Almost half of the polluting foreign particles enter living quarters through ventilation lines. In order to reduce the rate of pollution of the ventilation duct, experts recommend using special filters. However, they are not a guarantee that the ventilation will not get clogged over time.*

Cleaning can be done by mechanical or chemical means, it all depends on the type of contamination

Thus, over time, you will have to clean the contaminated structure. Air duct cleaning is performed using various methods, which can be both mechanical and chemical. **In order to clean the duct, they often resort to dismantling it, but this long process can be avoided if you take care of organizing an inspection hatch in advance.**

Types and sizes of ventilation flaps

Duct cleaning covers are used in a variety of applications. Depending on the operational characteristics, these devices are divided into two main types:

- revision;
- pit metering.

Revision . Such products are also called inspection or inspection. Installation of such inspection hatches is carried out on the channels of airways. They are used to control ventilation chambers. The convenience of this technology eliminates the need to dismantle the ventilation structure to clean the air duct from contamination. Such hatches are used to perform an auxiliary measure, namely, to measure the parameters of the air inside the air system.

Cleaning is carried out through special hatches, which are equipped when installing the ventilation system

Pitometric measurements. Used to measure air parameters in ventilation structures. The air duct cleaning hatch is not used.

The material from which such devices are made can be different, however, in most cases they are made from plastic and galvanized steel. Depending on the shape of the section, they are of two types:

- rectangular;
- square.

Today there is a wide range of inspection hatch sizes from 10x10 to 60x60 cm.

Features of duct cleaning covers

To measure the air parameter in the ventilation communication, both types of hatches (inspection and pit metering) can be used. Inspection devices can be used both for routine revisions and for carrying out a full-scale cleaning of airways.

Note! *The hatches are selected depending on the shape of the ventilation structure. Air ducts can be round or rectangular.*

Different hatches are used for round and rectangular ventilation structures. However, from a constructive point of view, they differ little from each other. **The installation of the hatches is carried out in the same way both on round communications and on rectangular ones: the product is a plate that is fixed to the ventilation duct by means of special screws.**

For cleaning, special hatches made of metal or plastic can be installed in the systems

The installation of inspection windows simplifies the process of monitoring the inner duct, since it is extremely problematic to check ventilation that is not equipped with such devices. In addition, inspection windows can reduce the overall maintenance costs of ventilation lines.

Where are the inspection hatches located?

In some situations, viewing devices for ventilation communication can be performed like ventilated windows. In such cases, the hatch design implies the presence of an inspection hatch and an exhaust grille. As a rule, such windows can be found on communications that function due to the natural movement of air currents. Installation of ventilated hatches is carried out on the duct and is simple. The element is fixed by means of dowels or self-tapping screws.

However, in other situations, the inspection window for cleaning the ventilation system is a separate device that performs specific functions. Inspection products are recommended to be mounted on straight sections of air ducts (for convenience). In addition, it should be noted that it is best to install such viewing windows in open areas that are freely available.

Installation of inspection hatches is allowed not only on the walls of ventilation ducts, but also in other places:

- on fans;
- for heat exchangers.

The distance between the viewing windows, which are installed on the ventilation structure, should not exceed 8-10 meters. Competent installation of the hatch allows you to clean a separate segment of the airway communication.