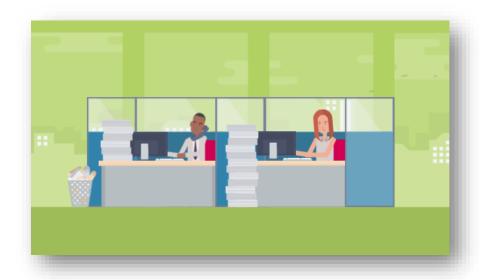




Ventilation of workplaces for the prevention and transmission of new Corona Virus SARS – COV 2

Introduction

Modern workplaces have a ventilation air conditioning system which is achieved through cooling-heating recirculating air, while renewing it through the intake of fresh (air from the environment) and simultaneously discharging part of the air into the environment. As the operation of these systems is based on air recirculation, a reasonable question arises as to whether and to what extent the virus could spread through these systems.



General characteristics of an air conditioning – ventilation system

The general principle of operating an air conditioning - ventilation system is based on the recirculation of the air through the ducts which the air is extracted from all areas and re-fed to them after being heated (cooled). At the same time, through the same system and the same or other ducts, a percentage of fresh air is introduced in order to achieve room air renewal.

According to the general specifications, these systems must have filters designed to retaining castings and/or microbial loads, but the characteristics of the filters depend on the design and the specific requirements of the installation.

As a rule, the filters, if existed and prope<mark>rly maintai</mark>ned, can retain airborne drop<mark>lets (this should also be checked with the manufacturer's instructions).</mark>

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Corona Virus SARS-COV - 2 - transmission

The new coronavirus (SARS-CoV-2), based on current scientific data is transmitted mainly through the respiratory droplets by sneezing, coughing or exhaling.

Suggestions - conclusions

Initially noted that the spread of Corona Virus SARS-COV-2 in the community - workplace and the reduction of outbreaks and the epidemic is primarily a matter of Public Health. Therefore, the management of preventive measures should, in all cases, follow the recommendations issued by the National Public Health Organization (NPHO) and the relevant bodies and Ministries.

Concerning ventilation of workspaces, the directive from the competent authorities states the need for adequate ventilation and proper maintenance of ventilation and air conditioning systems.

Based on the above and with the current data available, it is recommended to adequate ventilate the workspaces and if this is achieved through air conditioning system then maintenance should be carried out frequently (also according to the manufacturer's instructions).

<u>In addition to the above, GEP recommends, to the extent possible, the following:</u>

- ▶ Provide information for each installation by the air conditioner maintainer, installer, supplier, on whether the system has filters that may hold air droplets.
- ▶ Even if there has been recent maintenance of the air conditioning ventilation system (prior to the outbreak), there is an urgent need to maintain and clean the filters again.
- Disinfection of the air ducts where possible.
- If the air conditioning ventilation system can adjust the air intake rate (it has a mixing box)

and can be technically and energy efficient supported, there can be an adjustment so that there is no air recirculation but complete introduction of fresh air by cooling - heating it and then discharging it into the environment.



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