

Guidance on School Ventilation Systems (NVHR) and Spread of COVID-19 Viruses

There is no specific guidance on the use of NVHR Ventilation Systems in schools produced by the DFES or any included in the Output Specifications to date. Guidance can be found in CIBSE COVID-19 Ventilation Guide, Issue 4, dated 23 October 20, and a COVID-19 Ventilation Guide (Winter 2020-21) issued by manufacturers Breathing Buildings.

Below we summarise the guidance specific to the use of NVHR Units:-

The government guidance reminds employers of their legal responsibility for the safety of all those entering workplaces:

'To help you decide which actions to take, you need to carry out an appropriate COVID-19 Risk Assessment, just as you would for other health and safety related hazards. This risk assessment must be done in consultation with unions or staff.'

Undertaking that risk assessment may require advice from competent persons, such as professionally registered engineers who are Chartered or Incorporated engineers registered with the Engineering Council.

Evidence continues to suggest that in poorly ventilated indoor spaces, airborne aerosols are a possible transmission route and precautionary advice remains as before. Maintaining good levels of ventilation remains the key focus even in colder weather conditions, whilst minimising occupant discomfort due to draughts and lower indoor temperatures.

Guidance suggests that NVHR Units can still be used especially where they provide heating for the classrooms as they are individual classroom units and do not cause cross contamination between classes. However, in order to achieve lowered CO2 concentrations, lower internal temperatures may be experienced, and staff and pupils may need to wear outside clothing to compensate for these lower temperatures.

It is also recommended that all NVHR Units are put into full fresh air, maximum boost mode, between classroom changes so that a thorough purge of the space can be achieved.

Experts advice is that ventilation of the space is a key aspect of reducing the risk of spreading the virus, and guidance suggests opening windows where possible to increase ventilation, even in the winter is desirable. Obviously, if extreme external temperatures are present then this may not be possible.

If someone within the classroom is found to test positive for COVID-19, we would recommend that the system is turned off and that the entire space is properly cleaned, including the internal surfaces of the NVHR Unit, and any associated ductwork or diffusers before the classroom is put back into use.

Looking forward to new projects, we would need to consider more closely the design impacts of COVID-19 and see how these can be mitigated, especially where space heating is concerned.

For further information, please contact:-

Contact Name: Peter Harris, Regional Director
Mobile No: 07903 538 758
Email: pharris@silcockdawson.co.uk

