Co2 Monitor Usage Guidance & Application for Hepa13 Air Purifier Unit

1. Distributed by the CYPES (Education Department) to your School/College Reception.
2. Site Manager/Officer to install into chosen area to assess the air quality. Plug into electrical socket using the USB adapter and lead.
    a. Ensure that CO2 monitors are ideally placed at head height and away from windows, doors or air supply openings.
    b. Monitors should also be positioned at least 50cm away from people as their exhaled breath contains CO2. If monitors are placed too close, they may give a misleadingly high reading.
    c. Measurements within a space can vary during the day due to changes in numbers of occupants, activities, or ventilation rates. Doors and windows being open or closed can also have an effect.
    d. The amount of CO2 in the air is measured in parts per million (ppm). If your measurements in an occupied space seem very low (far below 400ppm) or very high (over 1500ppm), it's possible your monitor is in the wrong location and you should move it to another location in the space to get a more accurate reading.
    e. Instantaneous or 'snapshot' CO2 readings can be misleading, so you should take several measurements throughout the day frequently enough to represent changes in use of the room or space. Then calculate an average value for the occupied period.
    f. You may need to repeat monitoring at different times of the year as outdoor temperatures change and this will affect worker behaviour relating to opening windows and doors when your space relies on natural ventilation.
    g. Please disperse the Co2 monitors provided as required.

3. Site team to log and monitor outcomes prior to and during the period of use.
4. Use instructions for assistance – if the monitor shows amber or red, ensure ventilation mitigation has been implemented (open windows and doors).
5. If ventilation exceeds 1000ppm (amber or red) regularly whilst in use and after mitigation is in place, please contact your Safer Return to Schools Team Lead. [i]
6. Please ensure you are using the monitoring log below to record results as these will be required should you wish to apply to the Department, via the Safer Return to Schools Team Lead, for an air purifier unit.

Co2 Monitoring Log

Co2 Monitor Record						
Location[ii]	Results (prior to usage) - ppm	Results (during usage) - ppm	Inspectors Name	Date and Time	If amber or red what mitigation has been introduced	Results (after mitigation) - ppm

[i] https://www.flamefast.co.uk/img_ff/vision/downloads/CO2-infographic-Digital.pdf

[ii] **If you are using a numbered location, please provide a map to accompany this log.**

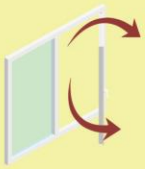
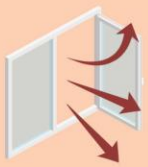
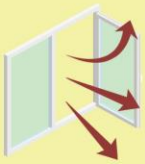
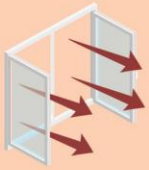
Government of JERSEY

Your CO_2 monitor EXPLAINED...

Good ventilation is key to helping reduce the spread of Viruses.Your Vision CO2 Monitor measures your air quality and advises if further ventilation is required!

There is 400ppm CO2 in the outside air, and we breathe out approximately 40,000ppm per breath. An increase in CO2 levels indicates that the air we have exhaled has not been removed, and this may include virus particles.

High CO2 levels are also associated with fatigue and a reduction in concentration.

Environment	Green	Yellow	Amber	Red
 High Occupancy & General Usage	 Aim for <800ppm when possible	 Provide additional ventilation	 Provide significant ventilation	 Vent on Max or windows fully open
 Low Occupancy or High Activity	 Aim for <600ppm when possible	 Provide significant ventilation	 Vent on Max or windows fully open	 Limit occupancy or reduce activity

What do I need to do?

There should always be some background ventilation. A few windows being slightly open creates air flow through a room. If internal doors are used for ventilation, please consider which areas the air may pass into.

CO2 levels may take time to rise and fall so take small steps to find a balance between air quality and thermal comfort, prioritising air quality wherever possible.

If levels regularly exceed 1,500ppm, the existing ventilation or room usage should be reviewed, and if there are any uncertainties, please contact a ventilation specialist.

www.flamefast-gas-safety.co.uk/vision

Process for Hepa13 Air Purifier Unit Application:

CO2 Monitors

- Install Co2 Monitors
- Record results regularly using log

Mitigation

- Employ ventilation guidance: Guidance for education and childcare: coronavirus (COVID-19) (gov.je)
- Re-record results

Hepa13 Air Purifier Unit

- Contact your Safer Return to Schools Team Lead
- Provide logged evidence that mitigation has not improved air quality
- Request an Hepa13 Air Purifier Unit

Air Purifier Unit maintenance

- Refer to Air Purifier usage guidance for for general maintenance and cleaning.
- Alert the Safer Return to Schools Team Lead lead if your device is faulty
- Alert the Safer Return to Schools Team Lead when new filters are required following 2200 hours of use.