



Property Ventilation Checklist

Room Name:

Date:



Making sure indoor spaces are well ventilated and have lots of fresh air is recommended for schools, along with good hygiene and other health measures.

Schools can use this checklist to help them assess their ventilation needs at the beginning and end of each season. It's important to note that air flow behaves differently at different temperatures. The bigger the temperature difference between the outside and inside, the more efficiently fresh outside air is drawn in through open windows. This allows good ventilation to be achieved year round, by employing different ventilation strategies depending on the season.

Openable windows and doors

Most schools are designed to be naturally ventilated, with opening windows and doors providing fresh air. For your naturally ventilated spaces, please check:

1	All windows open as originally designed and have not been fixed or painted shut.	☐
2	All windows can open freely without having to be forced.	☐
3	Any window winders, hinges, catches or closers that are missing or broken, have been remediated.	☐
4	Whether there is a way for windows to be held partially open (e.g. by security latches) and in small increments (e.g. 2cm, 5cm, and 10cm). If not, look at implementing this.	☐
5	Whether there is a way for exterior doors that are generally sheltered from adverse weather to be held or latched partially open, if this is required to boost the flow of fresh air. If not, look at implementing this.	☐
6	Whether there is a way for interior doors that connect to internal corridors or other circulation spaces to be held or latched partially open, if this is required to create a cross flow of air. If not, look at implementing this.	☐

Heat pumps and heating and cooling systems

Naturally ventilated spaces can have differing heating and cooling systems

1	The room's heating/cooling system(s) are working as originally designed and intended.	☐
2	Ensure that regular cleaning or maintenance of heating and cooling system(s) is up to date.	☐
3	Run all heating/cooling at the same time at its highest setting for a period to test that it performs as expected and doing so does not create other issues, e.g. tripping circuit breakers.	☐
4	When seasons change, trial different settings with windows open to determine how you might maximise the flow of fresh air while also maintaining a comfortable indoor temperature.	☐

Ducted mechanical ventilation systems (if fitted)

Ducted mechanical ventilation systems automatically source fresh air from the outside while also managing the temperature of the room. One way to identify if your space has a ducted mechanical ventilation system is to look for vents in the ceiling that bring in fresh air or extract old air.

Configuration and maintenance of ducted ventilation systems should only be done by appropriately skilled technicians. Please check:

1	The system has been recently checked, cleaned and maintained by an appropriately skilled technician.	☐
2	The system has been configured to come on at least two hours before the start of the school day, and to stay on for two hours after the school day ends.	☐
3	Prior to the coldest time in the winter season, ensure the system is managing the amount of fresh air brought in (as measured by a CO ₂ monitor) while maintaining a comfortable indoor temperature.	☐

Carbon Dioxide (CO₂) monitoring

Measuring CO₂ levels indicates how well-ventilated a room is. When in use, portable CO₂ monitors are to be positioned at around student head height, away from doors and windows, out of direct sunlight, and at least 1m away from the closest people. While the room is occupied, please:

1	Use your senses to determine if the room feels stuffy or has lingering smells, and if so, follow our guidance to try and improve ventilation.	☐
2	If the concern is not quickly alleviated, next try performing intermittent spot checks through the day by placing your portable CO ₂ monitor in the room for at least 5 minutes then reviewing the CO ₂ levels against our published guidance.	☐
3	If the spot check indicates there may be consistent and sustained CO ₂ levels over the school day, leave your portable CO ₂ monitor in the room for at least a full day to gather readings that can be shared with your NZSPA Property Advisor alongside details of the room's dimensions, number of students, use of heating and window openings.	☐

** NOTE short peaks in CO₂ levels over 1250ppm throughout the day are common, and peaks over 2000ppm can occur. If you have followed the published guidance and continue to have consistent and sustained CO₂ levels over 2000ppm, please contact your NZSPA Property Advisor.*

Further assistance

- Please contact your NZSPA Property Advisor if you require additional support to address any ventilation concerns, or you can contact NZSPA's ventilation team on ventilation.mailbox@schoolproperty.govt.nz.
- A technical ventilation calculator tool is used by NZSPA's ventilation team to further assess what property improvements may be needed to address ventilation challenges. If you request additional support, the team will require specific details of the room's usage, dimensions, doors, windows and window openings, supporting floor plans and photos, and any CO₂ readings that are available.
- Ventilation guidance for all schools is available online:
<https://www.schoolproperty.govt.nz/designing-school-property/building-performance/ventilation-for-school-buildings> [ventilation-schools](#).