

The placement of a dust collection system relies on many factors. Where your tools are; air flow requirements; shop elevation; and your Authority Having Jurisdiction's (AHJ) requirements. AHJ is an organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, an installation or a procedure. Typically, stronger systems (greater than 5 HP) will need to be located outdoors and /or equipped with engineering controls that comply with NFPA, national, state, local codes and satisfactory to the authority having jurisdiction.

Do I have to comply with NFPA 664?

The NFPA 664 standard shall be to provide minimum requirements, with due function, for the design, operation, and maintenance of woodworking and wood processing facilities for the safety to life, property protection, and mission continuity from fire and explosion. Actual installed CFM (cubic feet per minute) is the measured, aggregate airflow.

1. Is the total, combined airflow rate (CFM) of your dust collection system(s) less than 1500 CFM?
2. Is your shop less than 5000 ft²?



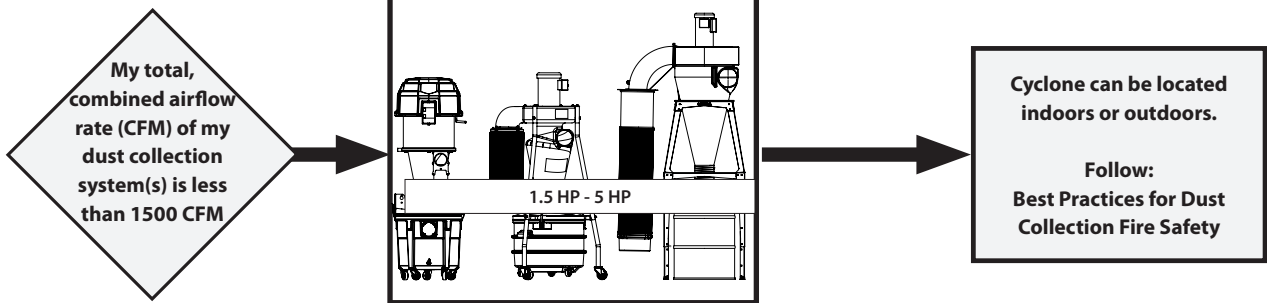
If you answered **NO** to either question, continue on to the *Where should I locate my collector?*



If you answered **YES** to both questions, you are exempt from NFPA 664. Continue on to our *Best Practices for Dust Collection Fire Safety*.

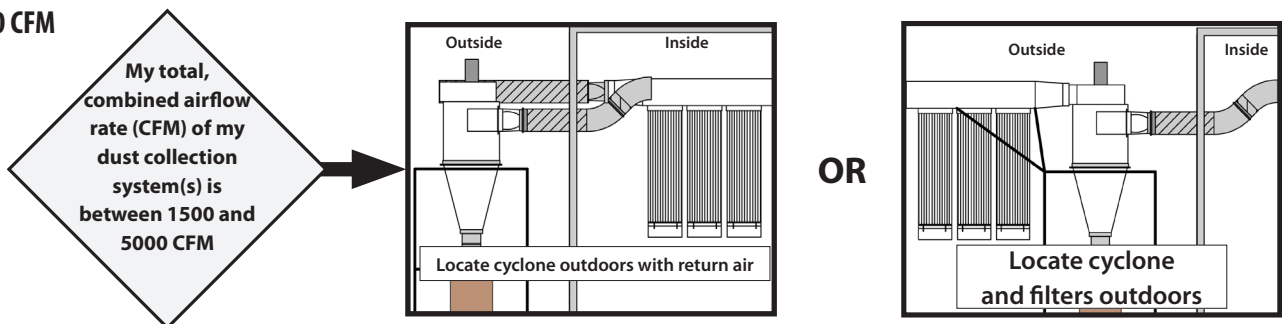
Where should I locate my dust collector?

< 1500 CFM

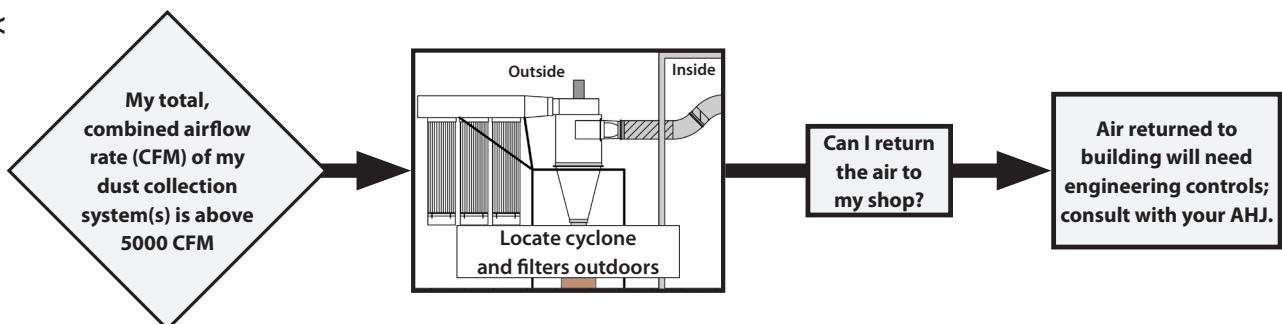


Oneida Air Systems recommends spark detection on systems over 1500 CFM.

1501 - 5000 CFM



5000 CFM <



Best Practices for Dust Collection Fire Safety

1. Consult your local AHJ (Authority Having Jurisdiction) for guidance and compliance with local codes and regulations.
2. Follow all equipment Owner's Manuals and preventive maintenance instructions.
3. Keep ABC-type fire extinguishers on hand. Make sure they are properly charged and inspected, and personnel are trained in their use.
4. Clean filters regularly - daily if possible - as it will maximize your airflow performance and help keep your ducting clean of dust.
5. Follow good housekeeping practices to prevent buildup of combustible dust. Floor sweeps and other dust collection devices can facilitate this.
6. Any dust collection duct that may possibly contain an ignition source (ember, spark, hot metals, etc.) should be equipped with a spark detection and extinguishing system. This should be located upstream from the dust collector, but downstream from any collection points.
7. Empty dust bins regularly (at least daily) and check often for possible smoldering material.
8. Keep dust collectors at least 20 feet from any possible exits, from other collectors, and from areas routinely occupied by personnel.
9. Don't use dust collection systems to collect possible ignition sources.
10. Keep possible ignition sources away from combustible dust. Sources include electrostatic discharge, electric current arc, glowing embers, hot surfaces, welding slag, frictional heat, and flames.
11. Don't use dust collection systems to collect combustible gases, vapors, or hybrid mixtures (mixture of flammable gas with combustible dust).
12. Keep an eye out for metal inclusions (tramp metal) when working with wood to prevent possible ignition sources from being introduced into the dust collection system.
13. Don't overload woodworking equipment, especially sanders. Excessive friction or heat may ignite dust.
14. Any collection hoods should be made of non-combustible material unless protected by automatic sprinklers.
15. Use metal ductwork whenever possible. Per NFPA, PVC should not be used for dust collection as it produces static charges.
16. Ensure ductwork can be cleaned out, particularly when working with resinous woods (southern yellow pine, spruce, fir) that can produce dust that adheres to ductwork.
17. Keep equipment and duct work grounded to prevent the buildup of static electricity.
18. Keep dust from building up on hot surfaces. For frequently cleaned surfaces, keep temperatures below 500°F. For infrequently cleaned surfaces, keep temperatures below 212°F.
19. Don't smoke around combustible materials, including dust.
20. Keep all exits and means of egress clear.