**Air purifier specification for Classrooms or Similar Sized Areas**

* Furnish HEPA air purification units with a minimum of 300 CFM output with filters installed and equipped at a minimum with 99.97% HEPA air filtration @ 0.3 microns (μm) IEST rating and comply with IEST-RP-CC001.6 and IEST-RP-CC034 protocols. All vendors shall provide documentation that proves the HEPA filters have 99.97% @ 0.3 microns filtration capacity. Both HEPA filter and Pre-filter shall be UL900 listed for flammability.
* Purifier shall be designed and manufactured in the U.S.
* There shall be at least one high-capacity pleated pre-filter at a minimum specification of MERV-8 or better with minimum lifespan to be 3 months or better based on 24 hours per day operation. Units without a pleated pre-filter will not be considered. Pre-filter to have toolless access for ease of maintenance.
* Air purifier to feature a slopped top to prevent books or other items from being placed on it. Air purifiers without a slopped top will not be considered.
* HEPA filter shall have a minimum dimension of 16” wide x 16” long with a depth of 12” with a metal or ABS plastic frame. Total cost of ownership and low maintenance is important, thus the purifier shall have a minimum HEPA filter lifespan of 4 years based on 24 hours per day operation.
* Air purifier shall at a minimum produce up to 300 CFM with a maximum noise of 47 dBA or less at full operational capacity measured at 5 ft.
* Air purifier enclosure at a minimum to be 22-gauge embossed steel with commercial-grade casters to support the weight. Purifier dimensions not to exceed (W/D/H), 18”/18”/44”. Units using a plastic enclosure construction will not be considered.
* Air purifier shall have intake at bottom of unit and discharge out of the top, while utilizing a commercial-grade double deflection grille so that air distribution can be optimized based on room design and placement.
* Purifiers shall have a HEPA filter be the main method of purification. Purifiers equipped with hydroxyl generators, dry hydrogen peroxide, photocatalytic oxidation or ozone will not be considered, even if it has the capability to be turned off. Purifiers that rely on ionization, oxidation or UVC as the main method of purification will not be considered. Purifiers equipped with ionization as an additional feature must be UL2998 ozone-free.
* Air purifier controls for fan speed and on/off switch shall be behind an access door to prevent tampering. Controls and power switches shall not be exposed on unit.
* Electrical power requirement will be a single 110/1/60 cord per unit. Air purifier shall use 75 watts or less at an output of 300 CFM.
* Fan type shall be a fully variable speed ECM Fan with standard electrical on/off switch control with variable speed dial. Fan shall have a brushless design and not require any periodic oiling. Minimum fan motor design life of 200,000 hours. Fan shall be located after the HEPA filter and pull air through HEPA at 250 Feet Per Minute or less.
* In the event of a power outage, air purifier shall restart on its own at the previously set speed setting upon power being restored.

**Air purifier specification for Medium Sized Areas (Band Rooms, Libraries, Media Centers etc.)**

* Furnish HEPA air purification units with a minimum of 500 CFM output with filters installed and equipped at a minimum with 99.97% HEPA air filtration @ 0.3 microns (μm) IEST rating and comply with IEST-RP-CC001.6 and IEST-RP-CC034 protocols. All vendors shall provide documentation that proves the HEPA filters have 99.97% @ 0.3 microns filtration capacity. Both HEPA filter and Pre-filter shall be UL900 listed for flammability.
* There shall be at least one high-capacity pleated pre-filter at a minimum specification of MERV-8 or better with minimum lifespan to be 3 months or better based on 24 hours per day operation. Units without a pleated pre-filter will not be considered. Pre-filter to have toolless access for ease of maintenance.
* Air purifier to feature a slopped top to prevent books or other items from being placed on it. Air purifiers without a slopped top will not be considered.
* HEPA filter shall have a minimum dimension of 20” wide x 20” long with a depth of 12” and a metal or ABS plastic frame. Total cost of ownership and low maintenance is important thus a minimum HEPA filter lifespan of 4 years based on 24 hours per day operation.
* Air purifier shall at a minimum produce up to 500 CFM with a maximum noise of 50 dBA or less at full operational capacity measured at 5 ft.
* Air purifier enclosure at a minimum to be 22-gauge embossed steel with commercial-grade casters to support the weight. Purifier dimension not to exceed (W/D/H), 22”/22”/47”. Units using a plastic enclosure construction will not be considered.
* Air purifier shall have intake at bottom of unit and discharge out of the top, while utilizing a commercial-grade double deflection grille so that air distribution can be optimized based on room design and placement.
* Purifiers shall have a HEPA filter be the main method of purification. Purifiers equipped with hydroxyl generators, dry hydrogen peroxide, photocatalytic oxidation or ozone will not be considered, even if it has the capability to be turned off. Purifiers that rely on ionization, oxidation or UVC as the main method of purification will not be considered. Purifiers equipped with ionization as an additional feature must be UL2998 ozone-free.
* Air purifier controls for fan speed and on/off switch shall be behind an access door to prevent tampering. Controls and power switches shall not be exposed on unit.
* Electrical power requirement will be a single 110/1/60 cord per unit. Air purifier shall use 140 watts or less at an output of 500 CFM.
* Fan type shall be a fully variable speed ECM Fan with standard electrical on/off switch control with variable speed dial with 1/4 HP motor. Fan shall have a brushless design and not require any periodic oiling. Minimum fan motor design life of 200,000 hours. Fan shall be located after the HEPA filter and pull air through HEPA at 250 Feet Per Minute or less.
* In the event of a power outage, air purifier shall restart on its own at the previously set speed setting upon power being restored.

**Air purifier specification for Large Sized Areas (Cafeterias, Gyms etc.)**

* Furnish HEPA air purification units with a minimum of 1,000 CFM output with filters installed and equipped at a minimum with 99.97% HEPA air filtration @ 0.3 microns (μm) IEST rating and comply with IEST-RP-CC001.6 and IEST-RP-CC034 protocols. All vendors shall provide documentation that proves the HEPA filters have 99.97% @ 0.3 microns filtration capacity. Both HEPA filter and Pre-filter shall be UL900 listed for flammability.
* There shall be at least one high-capacity pleated pre-filter at a minimum specification of MERV-8 or better with minimum lifespan to be 5 months or better based on 24 hours per day operation. Units without a pleated pre-filter will not be considered. Pre-filter to have toolless access for ease of maintenance.
* Air purifier to feature a slopped top to prevent books or other items from being placed on it. Air purifiers without a slopped top will not be considered.
* HEPA filter shall have a minimum dimension of 24” wide x 24” long with a depth of 12” with a metal or ABS plastic frame. Total cost of ownership and low maintenance is important thus a minimum HEPA filter lifespan of 4 years based on 24 hours per day operation.
* Air purifier at a minimum produce up to 1,000 CFM with a maximum noise of 60 dBA or less at full operational capacity measured at 5 ft.
* Air purifier enclosure at a minimum to be 22-gauge embossed steel with commercial-grade casters to support the weight. Purifier dimensions not to exceed (W/D/H), 26”/26”/60.5”. Units using a plastic enclosure construction will not be considered.
* Air purifier shall have intake at bottom of unit and discharge out of the top, while utilizing a commercial-grade double deflection grille so that air distribution can be optimized based on room design and placement.
* Purifiers shall have a HEPA filter be the main method of purification. Purifiers equipped with hydroxyl generators, dry hydrogen peroxide, photocatalytic oxidation or ozone will not be considered, even if it has the capability to be turned off. Purifiers that rely on ionization, oxidation or UVC as the main method of purification will not be considered. Purifiers equipped with ionization as an additional feature must be UL2998 ozone-free.
* Air purifier controls for fan speed and on/off switch shall be behind an access door to prevent tampering. Controls and power switches shall not be exposed on unit.
* Electrical power requirement will be a single 110/1/60 cord per unit. Air purifier shall use 375 watts or less at an output of 1,000 CFM.
* Fan type shall be a fully variable speed ECM Fan with standard electrical on/off switch control with variable speed dial with 1/2 HP motor. Fan shall have a brushless design and not require any periodic oiling. Minimum fan motor design life of 200,000 hours. Fan shall be located after the HEPA filter and pull air through HEPA at 250 Feet Per Minute or less.
* In the event of a power outage, air purifier shall restart on its own at the previously set speed setting upon power being restored.