






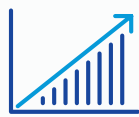
## Healthier Schools: Indoor Air Quality Solutions

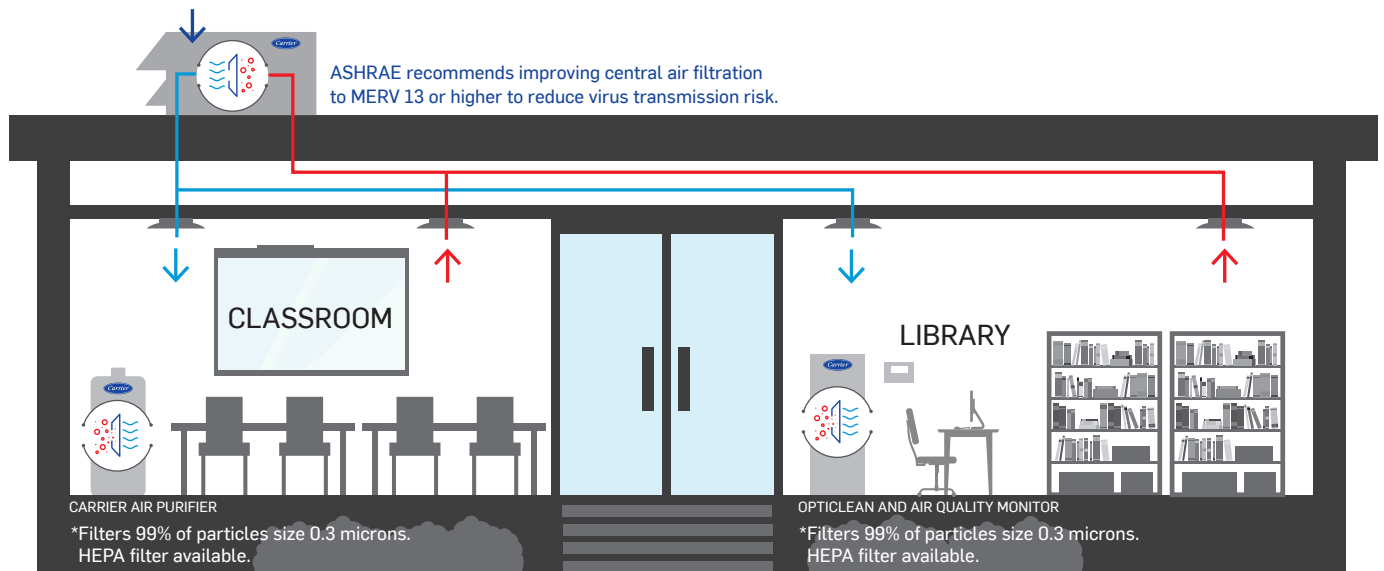


**Carrier provides air purifying solutions to help keep students and staff in school with confidence.**

The pandemic has elevated the importance of healthier air in the learning environment. The benefits of cleaner, healthier air also extend to asthma and allergy sufferers. At Carrier, we believe the health and well-being of students, teachers, and staff members are important. Our innovative air purification systems help provide cleaner and healthier air and enhance occupant experiences.

### Turn to Carrier to Help You...

<p><b>1</b> </p> <p>Assess the needs of your indoor environment.</p>	<p><b>2</b> </p> <p>Provide recommendations for service, modifications, and new equipment.</p>	<p><b>3</b> </p> <p>Implement equipment and services that make your indoor environment healthier.</p>	<p><b>4</b> </p> <p>Access the data that proves the value of the optimizations.</p>
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# Carrier offers schools the advanced air cleaning products they need.

Learn more about our air purifiers as well as our OptiClean™ air scrubber.

The following chart provides detailed specifications for our room air purifiers as well as our OptiClean system, which offers advanced air purification in larger spaces, such as libraries, cafeterias, and school auditoriums.

## PRODUCT OFFERINGS Air Purifiers



	<b>Air Purifier</b> RMAP-ST, RMAP-XL (Available in USA only)	<b>OptiClean</b> FN1AAF006, FN1AAF015
<b>Description</b>	Portable air purifier with High-Efficiency Filter that captures 99% of airborne particles sized 0.3 microns. A three-part filter includes a pre-filter for large particles and a carbon filter for odors and VOCs. A HEPA filter is available.	A portable dual-mode air scrubber and negative air machine have a HEPA filter 0.3 microns.
<b>Use Case</b>	Locations with limited open space where sound levels are a concern, such as classrooms, offices, and conferences rooms.	Larger rooms, business spaces, or light commercial environments with room size up to 4,500 sq. ft.
<b>Air Quality Monitor</b>	Integrated easy-to-read color-coded LED display.	Optional air quality monitoring kits available.
<b>Air Flow Management</b>	18 fan speeds that can be manually selected or automatically set depending on air quality.	Three fan speed options.
<b>Sound Level</b>	30-52 dB (RMAP-ST) or 28-56 dB	FN1AAF006 51-56dB; FN1AAF015 61-64 dB with optional diffuser.
<b>Filter/Filter Life</b>	3-part "all in one" filter with expected 9-12 month life. LED indicator light on the unit indicates when replacement is necessary.	MERV 7 pre-filter requires changing approximately every 90 days; Long life HEPA filter. LED indicator light on the unit indicates when replacement is necessary.

A layered strategy is recommended to mitigate particulate matter (PM) and airborne transmission risk that includes outdoor air ventilation<sup>1</sup>, HVAC system filtration<sup>2</sup> and supplemental air cleaning<sup>3</sup> through the use of portable air cleaners. If ventilation in the room has not been measured, portable air cleaners should target at least 5 air cycles per hour. Multiple air cleaners offer better room coverage in larger spaces.<sup>1</sup>

Based on Carrier testing, modeling and calculations, we expect the products to meet the following air cycles per hour:<sup>2</sup>

### 8' CEILINGS Room Coverage

Air Cycles/Hour	Room Size <sup>2,3</sup> (sq. ft.)	
	RMAP-ST	RMAP-XL
<b>10 (once/6 min)</b>	210	288
<b>6 (once/10 min)</b>	350	480
<b>5 (once/12 min)</b>	430	560

### 10' CEILINGS Room Coverage

Air Cycles/Hour	Room Size <sup>2</sup> (sq. ft.)			
	RMAP-ST	RMAP-XL	OptiClean FN1AAF006	OptiClean FN1AAF015
<b>10 (once/6 min)</b>	169	232	360	900
<b>6 (once/10 min)</b>	282	387	600	1,500
<b>5 (once/12 min)</b>	338	464	710	1,800
<b>4 (once/15 min)</b>	423	580	900	2,250
<b>2 (once/30 min)</b>	845	1,160	1,800	4,500

<sup>1</sup> Portable Air Cleaners: Selection and Application Considerations for COVID-19 Risk Reduction, Healthy Buildings Program at the Harvard T.H. Chan School of Public Health (2020) <https://schools.forhealth.org/wp-content/uploads/sites/19/2020/08/Harvard-Healthy-Buildings-Program-Portable-Air-Cleaners.pdf>.

<sup>2</sup> Room size guidance for supplemental air cleaning of large spaces is based on the following formula:  $ACH (1/hr) = (Airflow\ Rate\ (cfm) \times (60\ min/1\ hr)) / (Room\ area\ (ft^2) \times ceiling\ height\ (ft))$ . 1 air cycle per hour means that the volume of air in a room is replaced with filtered air on average once in an hour. More air cycles per hour indicates higher filtration. Effectiveness may vary depending on room configuration, deployment, fan setting, location, ventilation, usage, occupancy and other factors. HEPA models and highest fan speed recommended.

<sup>3</sup> Room size guidance for supplemental air cleaning of smaller spaces is based on Clean Air Delivery Rate (CADR) at maximum fan speed as verified by independent, third-party testing through the Association of Home Appliance Manufacturer (AHAM). Calculations divide the cubic footage of the room (assuming 8 ft. ceilings) by the CADR. AHAM defines CADR as "the reduction rate (cleaning speed) of specific particulates by an air purifier or other filtration system in a controlled environment", measured in cubic feet per minute. "Room Size is based upon the ability of the air cleaner in smoke CADR to reduce the concentration of particles by 80 %." For additional information and constraints on AHAM CADR testing, see <https://ahamverifide.org/wp-content/uploads/2020/09/Testing-of-Portable-Air-Cleaner-Performance-FAQs-2020-Updates.pdf>.

