

Understanding & Using American Rescue Plan (ARP ESSER) Funds to Improve K-12 HVAC Systems



Understanding the American Rescue Plan (ARP)

This document outlines the American Rescue Plan Elementary and Secondary School Emergency Relief (ARP ESSER) Fund under the American Rescue Plan (ARP) Act of 2021, Public Law 117-2, enacted on March 11, 2021.

ARP ESSER provides a total of nearly \$122 billion to states and school districts to help safely reopen and sustain the safe operation of schools and address the impact of the coronavirus pandemic on the nation's students.

In addition to ARP ESSER, the ARP Act includes \$3 billion for special education, \$850 million for the Outlying Areas, \$2.75 billion to support non-public schools, and additional funding for homeless children and youth, tribal educational agencies, Native Hawaiians, and Alaska Natives.

ARP ESSER Funding Breakdown for Education

The ARP ESSER Fund includes three state-level reservations for activities and interventions that respond to students' academic, social,

State Allocation of ARP ESSER Funds

A State must subgrant not less than 90% of its total ARP ESSER allocation to local educational agencies (LEAs) (including charter schools that are LEAs) in the State to help meet a wide range of needs arising from the coronavirus pandemic, including reopening schools safely, sustaining their safe operation, and addressing students' social, emotional, mental health, and academic needs resulting from the pandemic. The State must allocate these funds to LEAs on the basis of their respective shares of funds received under Title I, Part A of the Elementary and Secondary Education Act of 1965 (ESEA) in fiscal year (FY) 2020.

For more information:

https://oese.ed.gov/files/2021/03/FINAL_ARP-ESSER-FACT-SHEET.pdf

and emotional needs and address the disproportionate impact of COVID-19 on underrepresented student subgroups, including each major racial and ethnic group, children from low-income families, children with disabilities, English learners, gender, migrant students, students experiencing homelessness, and children and youth in foster care.



Carrier

Meeting Federal Guidelines for Elementary Secondary School Emergency Relief Funds (ESSER) & State Education Agencies (SEAs)

Carrier Product Offering	Filtration ^{1,2}	Ventilation ^{1,2}	Relative Humidity ¹	Controls ¹	Utility Incentives for Energy
Air Purifier OptiClean ^{™ 3,4}	HEPA - 99.97%	Reduction of O.A. ACHs	RH controls through less required O.A. ACH	Room recirculated ACH & run time	Implementing DCV
Packaged Rooftop Units WeatherMaker®/Master/ Expert Series ^{3,4}	MERV-13	Economizer function for increased O.A. ACHs	Hot gas reheat & subcooling	DCV-CO ₂ , RH & Run Time	Heat Pump
Water Source Heat Pumps AquaZone™ ⁴	MERV-13	Reduction of O.A. ACHs	Hot gas reheat	Run Time	Efficiency
Air Handling Units AERO ^{® 3.4}	MERV-13 to HEPA - 99.97%	Economizer function for increased O.A. ACHs	Increased cooling coil rows & energy recovery devices	DCV-CO ₂ , RH (H ₂ O or DX) & Run Time	VFD on Fan & Energy Recovery
Water & Air-Cooled Chillers AquaSnap®/Force/Edge	Improved M.A.T & wb temps	Increased additional capacity for cooling	Additional increased capacity to allow for lower CWS temp	Chilled water temp. reset & Run Time	VFDs, Heat Pump, Reduction of lift & Cooling loop temp reset

¹ASHRAE K-12 reopening recommendation • ²CDC school mitigation qualifications • ³Can be provided with UV-C lamps • ⁴Can be provided with lonization

Ways to Improve Indoor Air Quality

Carrier can help you evaluate—and if necessary upgrade—essential aspects of your school's current HVAC system to make sure it delivers a high level of indoor air quality (IAQ) to support key wellness initiatives.



Real-time IAQ data monitoring,

Building Standard[™], provides

compared to the WELL

actionable insights into

being.

occupant health and well-



Bringing in more fresh outside air to replace indoor air can help reduce airborne contaminants.

F improve FILTRATION

The higher the MERV rating, the more efficient the filter. ASHRAE recommends MERV 13 or higher for K-12 schools whenever possible. UV UV LAMPS/ IONIZATION

UV lights not only kill pathogens—they keep coils clean, which reduces pressure drop and enables the installation of more sophisticated air filters.

RH relative HUMIDITY

Keeping indoor humidity within the ASHRAE 55 suggested range (40% and 60%) can minimize the effects of bacteria and certain allergens.



viruses while minimizing mold growth

