

Filter Order & Replacement

Filters for School Year 20-21
 Filters are on a 90 day cycle *
 MERV 13 Filters **

	Order Placed	Install Filter Dates		Filtration Days	Sites	Units Per Site
20-Jul	July 30,2020	Aug. 17, 2020 - Aug. 21, 2020	Done	* 82 days	Jackson	72
20-Oct.	Oct. 1, 2020	*** Nov. 23, 2020 - *** Nov. 24, 2020	Scheduled	* 64 days	Bidwell	44
21- Jan.	Jan. 4, 2021	Feb. 17, 2021 - Feb. 19, 2021	Scheduled	* 85 days	Metteer	82
21-May	May 3, 2021	June 7, 2021 - June 11, 2021	Scheduled	* 78 days	Vista	57
21-Aug.	Aug. 2, 2021	Sept. 7, 2021 - Sept. 10, 2021	Scheduled			

* HVAC days are calculated due to air filtration with the shut down of HVAC Units every Sunday and Holidays

** Manufacturer has recommended the MERV 13 filters for proper filtration for COVID - 19

*** All Maintenance staff installing filters due to limited work days for holiday week.

Average classrooms ranges roughly at 1000sq foot with 10' ceilings here at the RBUESD, this equals 10,000cu ft of air. On the average our HVAC system pulls 2200cfm (cubic feet per minute) through the unit. This means every 4.5minutes the entire air is changed. Every hour there will be 13.3 full room air exchanges. Every cubic foot of air is being past through a merv 13 air filter 13.3 times

If a personal air purifier was to be placed in the room in addition to the districts current HVAC system by a staff member the average cost of a unit that would make any significant impact with air exchange would roughly be \$650 plus \$85-100 x2 for merv 13 filters that would do 1500 sqft room with 8' ceiling. These units only do 350cfm. An air exchange on this model that would be used in 1000 sqft with 10' ceiling would be roughly 35 minutes which is the same space as our classrooms. That equals 1.7 air exchanges in one hour.

DISCLAIMER: These numbers best on the district as a whole. Each classroom and HVAC system may differ slightly depending on age of the unit as well as the exact cubic air space. The air exchange rates were provided by our local HVAC vendor. The merv 13 air filters provided are suggested by our HVAC supplier to be changed every 90 days of use.

If the use of both- District HVAC system and a personal air purifier were used, the air exchange rate would only decrease from 4.5 minutes down to 4 minutes. Our current HVAC system is also able to bring in fresh air to the extent as possible.