

SUNCOOLER™ VENTILATION

Healthy Fresh Air exchanges

Solar powered AHU ventilation equipment for classrooms and educational settings of all sizes. *(AHU Air Handling Unit)*

Year round operation. One day installation.



A COVID-19 mitigation strategy:

“...maximize fresh outdoor air and minimize indoor air recirculation"...."Allowing fresh air into a room dilutes and displaces airborne particles, which may decrease virus transmission”

Citation: Oregon Health Authority Ready Schools, Safe Learners Guidance for School Year 2020-2021 Version 5.5.0 January 19, 2021 Section 2j pg 45/91.

The SunCooler provides “ventilation mitigation strategies” to minimize “contaminated air to flow directly from one person over another” and maximizes fresh outdoor air flow to occupied spaces.

Citation: Centers for Disease Control and Prevention <https://www.cdc.gov/coronavirus/2019-ncov/community/ventilation.html>



Northwest
Renewable
Energy CORP

Innovating Green Technology

NWREC.us

Green AHU Ventilation Technology Made in Oregon



Improve the air quality of your classrooms, hallways, open spaces, and gymnasiums. Fresh air exchanges dilute airborne contaminants and viruses. The SunCooler solar powered AHU ventilators provide up to 4 Air Handling modes to meet your ventilation needs from an individual classroom to the entire school facility.

- **Exhaust** out contaminated indoor air through the SunCooler AHU drawing in fresh outdoor air via an open window or door
- **Induce** fresh outdoor air through the SunCooler AHU pushing out the contaminated indoor air through an open window or door.
- **Night Flush**: Induce or exhaust fresh outdoor air into the space, flushing out contaminants prior to occupancy. Start each day with fresh clean air.
- **Thermal Balancing Destratification**: When equipped with the optional destratifier plenum; The SunCooler AHU ventilator pushes warm ceiling air down to save on space heating costs; Perfect for high bay spaces such as gymnasiums, cafeterias and workshops.

Engineering:

- Power generated solely from Solar Power, No grid connection!
- Up to 15,000 CFM
- Onboard battery storage for night time operation
- No wiring to install or electrician needed
- Filtration up to MERV 8 optional
- Quiet operation of 50dB for classroom use

User Interface Control Options:

- Wireless control or USB direct connect
- Downloadable data log spread sheets from each unit
- Programming control by facilities personnel
- SunCooler laptop provided for programming and scheduling operation

Programmability and sensor options:

- Option 1: Time of day/month/year
- Option 2: Time of day/month/year + Indoor/outdoor temperature & humidity comparative
- Option 3: Time of day/month/year + Indoor/outdoor temperature & humidity comparative + CO2, VOC, Occupancy sensor, etc.

Installation Info: Retrofit onto existing buildings or new construction

- Who can I get to install these AHU Ventilators?
 - NWREC the manufacturer can provide “Turn Key” installation or provide onsite consultation for your local roofing or HVAC contractor
 - Installs on all roof types, pitch angles, above attic spaces or non-attic roof decks.
 - For attic spaces simply duct down to the room ceiling

Existing Building Retrofit Install: Installs in 1-2 days

- New roof deck penetration: Roofer cuts in new roof deck penetration using structural engineer penetration reinforcement drawings. 1-2 day install
- Pre-Existing curb/penetration: Remove old ventilator, install our curb adapter and place the SunCooler AHU ventilator on the curb adapter. 1 day install

SunCooler AHU Ventilator equipment options:

- Destratification Plenum, High Wind Securement, Bird spikes, Lightning rods, and filtration.

Warranty: 3 Years parts and Labor

AIR HANDLING MODES

Solar Powered Ventilation

