

SUNCOOLER™ VENTILATION FOR CORRECTIONAL FACILITIES

Solar powered AHU ventilation equipment for Penitentiaries,
state and federal prison facilities. *(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 facilities; cells, hallways, dining rooms, and open spaces. 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 cell to the entire correctional facility.

- **Exhaust** out contaminated indoor air through the SunCooler AHU drawing in fresh outdoor air via an open window or vents.
- **Induce** fresh outdoor air through the SunCooler AHU pushing out the contaminated indoor air through an open window or vent.
- **Night Flush:** Induce or exhaust fresh outdoor air into the space, flushing out contaminants. 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 Multi-level cell blocks, 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 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

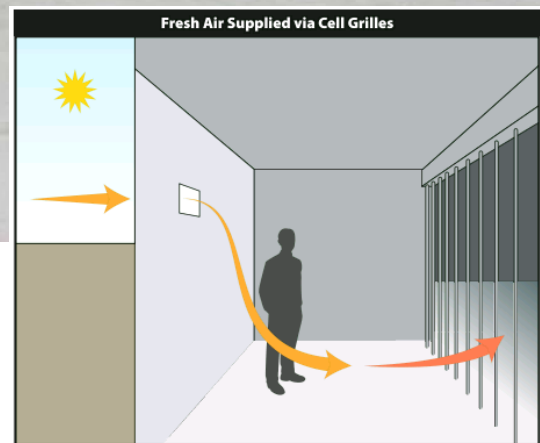
Existing Building Retrofit Install: Installs in 1-2 days

- 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:

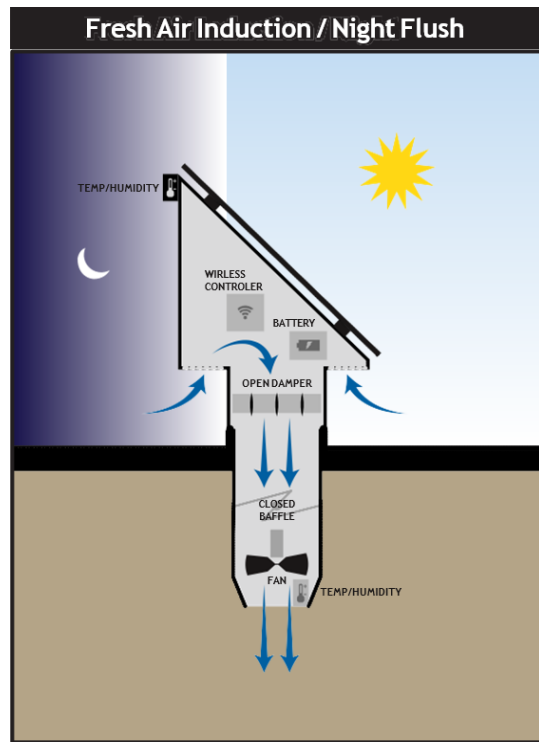
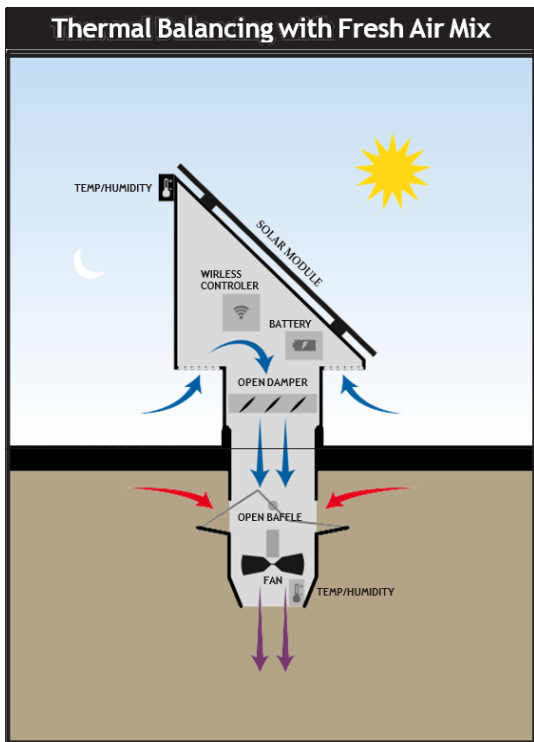
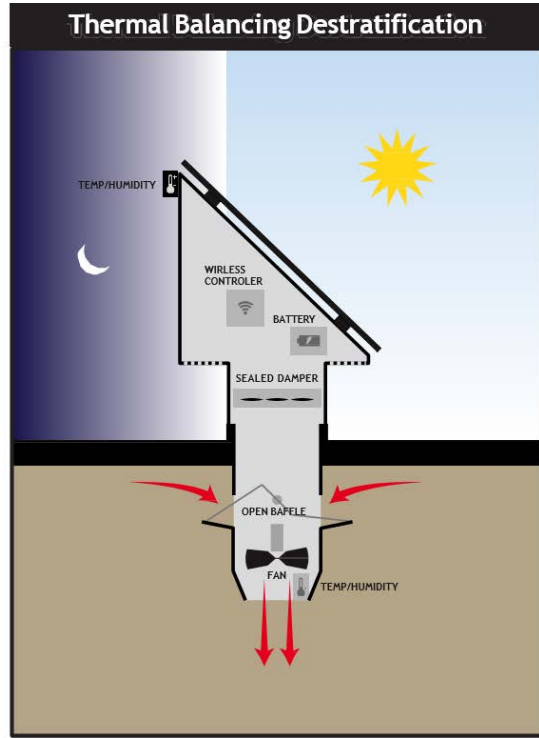
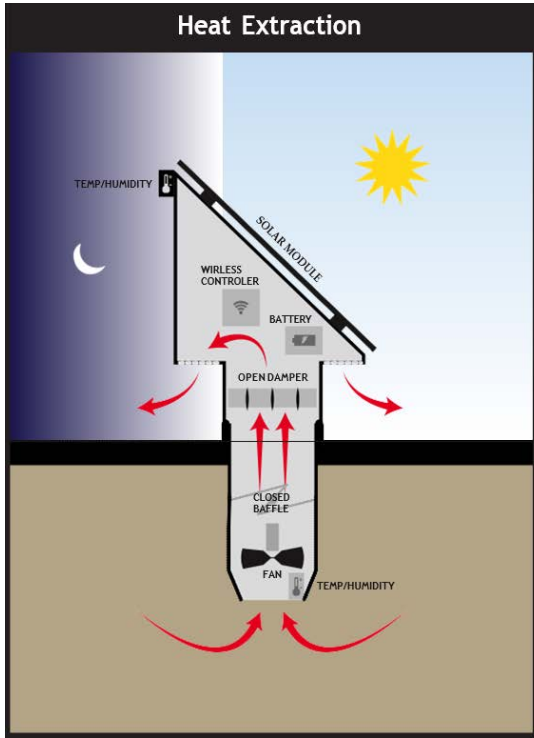
- Destratification Plenum, High Wind Securement, Bird spikes, Lightning rods, and filtration.

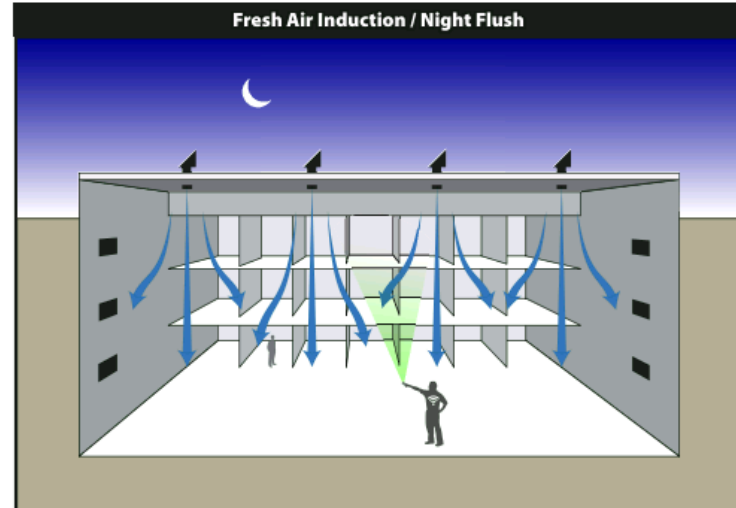
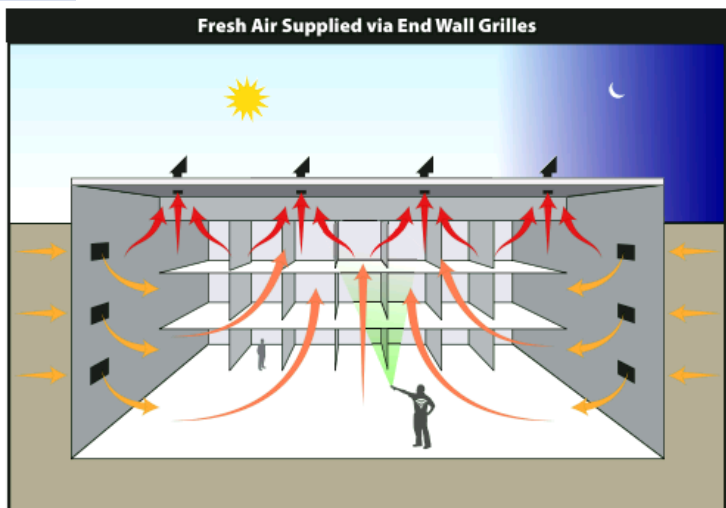
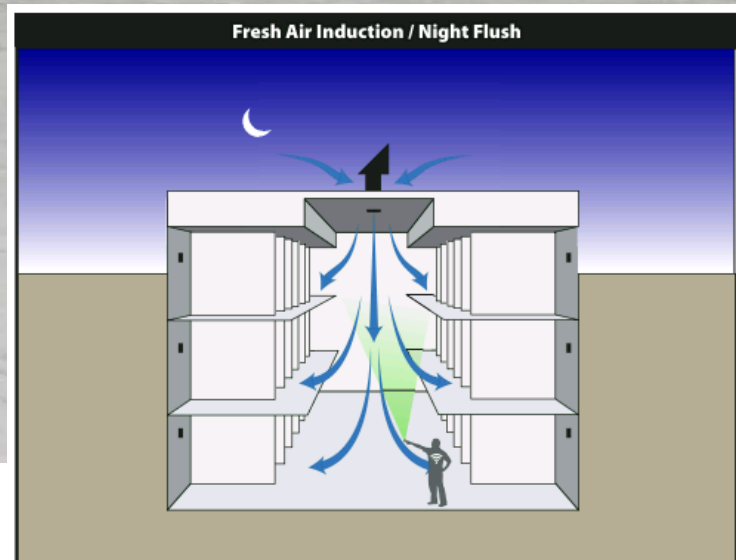
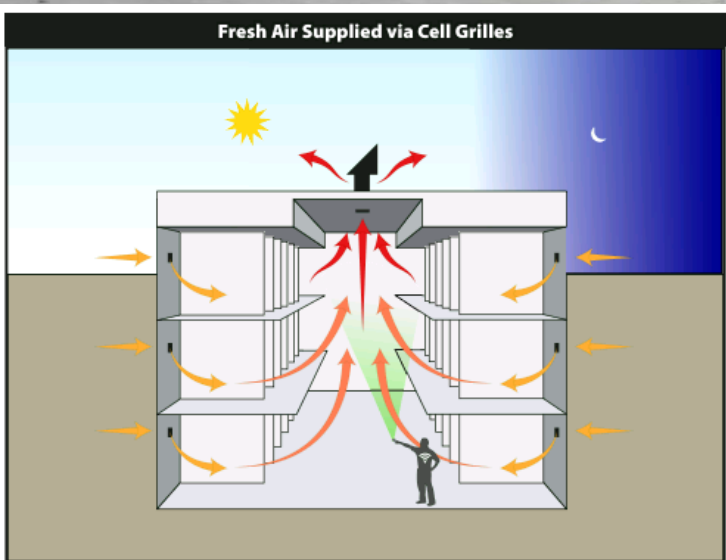
Warranty: 3 Years parts and Labor



Solar Powered Ventilation

AIR HANDLING MODES





Solar Powered Ventilation