



The SolarWall technology generates significant heat energy, and has been described as “backing up to a free gas pump.”

## Applications

- Coffee beans
- Tea withering/drying
- Biomass
- Nuts
- Fruit
- Spices
- Rice
- Corn
- Cocoa beans
- Rubber

## Other Applications

- Industrial process heating
- Laundry drying
- Composting

## SolarWall: Reduce Your Heating Costs

SolarWall® air heating systems can be used to reduce costs and increase revenue for agricultural products that require drying. A SolarWall system is easily retrofit to existing active drying processes that use fuels such as diesel, oil or wood to generate heat. In addition, it is also available as a turnkey, shipping-container based system to replace passive sun-drying to accelerate the drying process and improve quality.

SolarWall systems heat air up to 55°C (100°F) above ambient, making it ideally suited for many agricultural crop drying applications. In a conventional active drying system, the SolarWall system may provide all of the heat during a sunny day or act as a pre-heat during cloudy conditions. In both cases it substantially reduces the dependency on traditional fuels which has a myriad of positive effects, ranging from lower operating costs, to decreased reliance on fuels that need to be transported to remote sites, to GHG emission reductions. SolarWall systems also help counteract deforestation by reducing the quantity of trees that are harvested for fuel.

SolarWall solar air heating systems may reduce or eliminate poly-aromatic hydrocarbons (PAHs) created by displacing conventional fossil fuels used in active drying systems. As countries around the world look towards “green”, they are also looking at how their food is processed and if it is safe and pure.





## No natural gas needed. That's nuts!

Walnuts, that is. Keyawa Orchards in California dries over 12 million lbs. of the delicious crunchies every year. Farmers from miles around depend on the company to wash the nuts, dry them and send them on to the processing companies.

FDA regulations are strict; moisture must be held at less than 8% – which requires a lot of heat. However, if the nuts dry out too quickly, they are ruined. Getting things “just right” is crucial to the taste of Keyawa Orchards’ product. Doing so cost-effectively is crucial to profit. Enter SolarWall.

Ron Keyawa, company founder and CEO explains: *“To dry the nuts, I need air that’s at 110°F, so if ambient is 80°F, then I need a 30° heat gain. I’ve got 600,000 cu. ft./min of air to heat, so at night, when things cool down here, I use a lot of natural gas! That’s expensive – really expensive – so I looked for ways to reduce my energy costs and found SolarWall. Now there are times when I don’t need to run natural gas at all because I’m getting enough heat from the SolarWall panels on the roof to shut off the burners.”*

*“What happens is that the SolarWall system preheats the air before it reaches the fans. The system modulates itself. The probes sense the temperature of the air coming in and tell the burners not to work so hard. If the SolarWall has already heated it enough, the air goes right past the burner. Frequently I even shut down the system and use total SolarWall [technology] to dry the nuts. What I like about it, it’s simple. There’s no maintenance, no moving parts. Once you set it up it’s real simple.”*

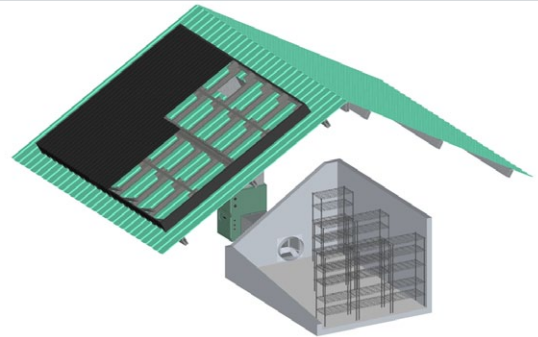
## You don’t have an active drying process?

Our modular container-based SolarWall systems are custom tailored for a specific crop including temperatures and internal tray systems. They are shipped with all equipment including fans, photovoltaics (to power fans) and drying racks. Active drying also substantially decreases drying time in addition to reducing the potential for mycotoxins to form on crops.



### Rockland County, NY, Composting Facility

SolarWall heating systems are also suitable for a wide range of industrial process and commercial drying operations, from laundry drying to preheating combustion air for furnaces & composting facilities.



SolarWall drying can either act as a stand alone system, or in preheating capacity to traditional mechanical operations. The technology can be easily incorporated into tunnel, trough or conveyor dryers.

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