

The good old ways? In the widening world of SolarWall® there may soon be no such thing!

**Versatile technology rated
“40% more efficient at 25% less cost”
than traditional crop-drying.**

The unique (and still unmatched) technology that helped SolarWall to leadership in heating buildings via solar energy is now setting standards for a wide range of products.

From curing coffee beans to drying laundry, SolarWall’s extraordinary range of products can be used just about anywhere, for any job that needs heat – lots of heat. SolarWall systems not only help companies save on energy costs, they often outperform traditional methods in other ways, too. To wit:



Because it does not burn or harm crops (as can happen with steam or wood-fired drying) SolarWall crop drying is making its mark around the agricultural world – from wood to manure to more delicate crops such as tea, coffee, fruit, rubber, cocoa beans, nuts and rice.

In Costa Rica, for example, SolarWall roof panels dry coffee beans in ways rated as being “40% more efficient at 25% less cost” than do conventional solar products. Result:

When a cutting-edge solar coffee-drying test site (the largest of its kind in Central America) opened in Tilaran, Canadian Trade Counsellor Sylvy Garipey declared the occasion:

“...an exciting day for the future of solar energy in agricultural applications. This facility exemplifies the unlimited potential and benefits of this renewable energy source.”

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

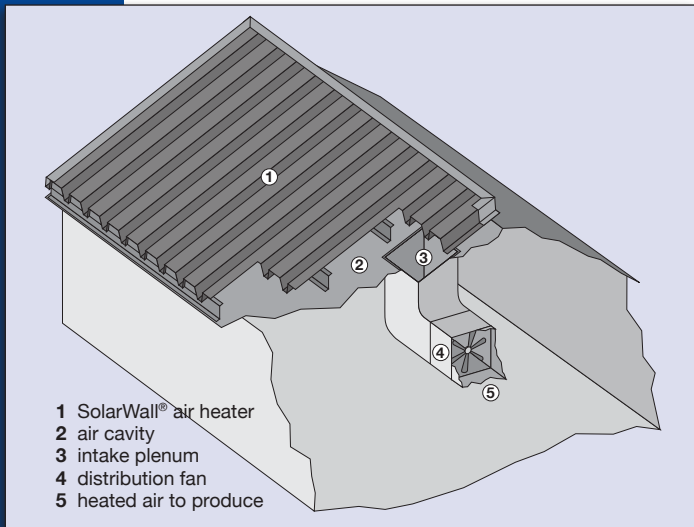


held at less than 8% – which requires a lot of heat. However, if the nuts dry out too quickly, they are ruined. Getting things “just right” is crucial to the taste of Keyawa Orchards’ product. Doing so cost-effectively is crucial to profit. Enter SolarWall.

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.

"In the day, most of the time the system is on low fire – in other words, it's barely on. Sometime before 10:00 a.m., when the sun starts hitting and the SolarWall really kicks in, I turn off the heater system because I don't need the burners. Then, after 3:00 p.m. or so, I fire up the burner again for when it's going to be needed. (Most of the time it still idles on low because of the heat gain I'm getting.) Then, as the sun sets, the burners gradually kick in to supplement things.



"Even at night, I'm getting some help from the SolarWall [system]... a little gain from the radiant heat that's being brought in. So I'm really saving all the time.

"What I like about it, it's simple. There's no maintenance, no moving parts. Once you set it up it's real simple."

Keyawa Orchards is now planning to expand



its operations and will be opening a new 12,000 sq. ft. (minimum!) facility in the near future. Pleased with the \$14,000 per annum savings in energy costs they are getting from the SolarWall system, using this non-polluting renewable source of energy is a priority for the new facility.

Says Keyawa, "I'm currently designing the new building with one directional slope toward the south so that I can add SolarWall if I want, and grab more of the sun. I'm gearing up for the future!"

From nuts and napkins to... well, you tell us!

Companies with nuts, tea and other crops to dry aren't the only ones to benefit from SolarWall's heating panels.

SolarWall heater systems are suitable for a wide range of commercial drying purposes, from commercial laundry drying in hotels, hospitals and other institutions, to preheating combustion air for furnaces, to... well, to any situation in which air needs to be heated as part of the manufacturing process.

Since each square meter of SolarWall paneling produces the same amount of heat as that generated by a 500-watt heater, using "costless" solar energy to reduce the amount of natural gas needed for the operation can result in significant savings. In many operations, burners not only get turned down, they get turned off – completely – for extended periods of time!

Further energy savings are realized when the SolarWall system is also used to augment night-time heating by acting as a heat exchanger capturing roof heat loss.



A "nitty-gritty" finale: SolarWall panels work well with tunnel, trough, conveyor and other types of driers; existing operations can be easily converted to include solar heating of the air being directed to the drier intake fans. The all-metal panels are installed on either the roof or a nearby wall and the system is then connected to the drier fan intake. All the air passes through the solar panels first, where it is pre-heated before being directed to the drying chamber.

To learn more about how your operation might benefit from including SolarWall panels in the design of a new facility, or by retrofitting an existing system, please call and talk to one of our engineers.

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