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Solatube International Inc. Illuminating new possibilities in what daylighting can be

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Since humans have built and inhabited all types of man-made spaces, one of the greatest challenges has been harvesting and distributing the highest quality source of natural light: sunlight. No other source of light quite matches sunlight in its natural ability to display colors and illuminate in the finest sense. Natural light not only looks better, but also has the ability to make people feel better.

Harnessing and transferring that perfect light indoors, into spaces where natural light was previously lacking, is the foundation of Solatube International Inc. (Solatube), now a global leader in tubular daylighting devices (TDD). "Before the 1980s, there was no such thing as a tubular skylight or daylighting device," says Robert E. Westfall Jr., now president of Solatube.

A different idea from Down Under

That was until an Australian inventor created a product that revolutionized the way daylight was brought into a building. "He had an idea for, basically, a bubble on a roof with a tube that transferred light down into the room as a skylight replacement," recounts Westfall.

In 1986, Solatube applied for its first patent to install TDD, and by 1987, the first prototype was installed. The original design features a rooftop light capturing system that redirects daylight through a highly reflective cylinder to a diffuser at the ceiling level. "A group of inventors came together to manufacture the product and it totally exploded in Australia as the most popular skylight replacement in the early 1990s," shares Westfall.

With room to grow, Solatube eventually set up a dealer network in the U.S. "At the time, the product was just a way to bring light into people's homes," tells Westfall. "After a decade or so of dynamic growth, Solatube was quickly adopted as a retrofit product, used in existing hallways, closets, interior bathrooms and more where people wanted natural light beyond window access."

Robust, rapid growth

It wasn't too long before Solatube found a foothold in the commercial market. "We started seeing applicable scenarios in schools, retail stores and museums, but Solatube wasn't designed for commercial use, so we manufactured a larger unit for the market and things really started to take off," recounts Westfall.

A new commercial application coupled with the energy crisis in the early 2000s made room for Solatube to rise to the top of the natural daylight market. "There were brown-outs happening in California and certain grocery chains came to us, saying when this happened, they were out of business and needed a way to stay open," says Westfall. "At that point we realized Solatube was solving a bigger problem."

Then the sustainability movement caught on. "As this happened the market for natural, off-the-grid lighting solutions grew," shares Westfall. "Studies also started to show that natural light makes people feel better, happier and healthier at work and school and we saw another period of robust growth in both the residential and commercial divisions."

Industry-leading innovation

According to Westfall, Solatube grew by pioneering daylighting technology. "We were improving the technology while others were sitting on the sidelines and now it's one of the hottest categories in daylighting," he measures. "By operating on the concept of what

can be, not what is, we have revolutionized the way buildings are built."

Based in Vista, California, Solatube is now one of the largest manufacturers of solar lighting in the U.S. "Now, we're in almost every continent with a network of dealers and distributors in the U.S. and Canada and our products are used in approximately 1,000 projects a year," reveals Westfall. "We directly employ 150 people, but through our authorized dealers, we employ about 1,000 people directly associated with the Solatube movement."

From private homes to schools, retail facilities to office buildings, warehouses and even conference centers, Solatube is capturing all the beautiful advantages of natural lighting. With a small, modular and adaptable design, Solatube is easily introduced into existing construction.

"We are proud to be able to go into an existing building and be part of their sustainability initiative; we don't have to start completely fresh," compares Westfall.

From the Solatube Skyvault Series, incorporating big tubes for big spaces, such as airports, warehouses and convention centers, to Solar Star attic fans for the home, the company is increasing comfort by letting the sun shine in. "We work with a lot of enlightened architects and engineers who are also pioneering the product in new areas," says Westfall. "We worked on a Net-Zero energy school, one of the first of its kinds in Kentucky – Richardsville Elementary School."

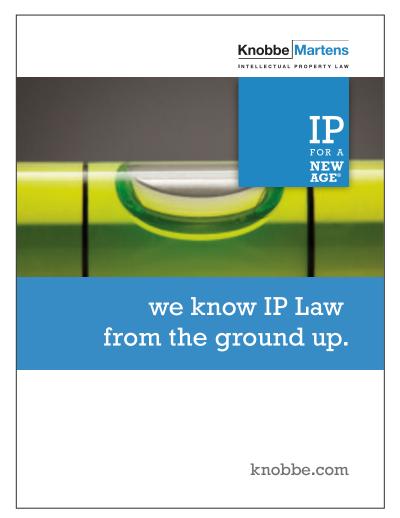
Among an extensive portfolio of energy saving and LEED-certified projects, Westfall says one of the most stellar facilities is Solatube's own building. "I'm particularly proud of our facility in Vista," he says. "We built out the existing building, using the product everywhere possible to ensure all of our employees get as much natural light as possible."

Westfall and his team have more than enough to be proud of. "Everyone who comes here is blown away by what we can do with this technology," continues Westfall. "We use it as an international showcase for office, conference, warehousing and manufacturing applications – all within our own building. People come from all over the world to see it."

People also came from all over the world to see Solatube at the 2014 Greenbuild International Conference and

Expo (Greenbuild) in New Orleans. Westfall says his long-term goal for the company is to implement Solatube's TDD daylighting technology in major conference and convention center facilities, such as the Greenbuild exhibit.

Solatube International Inc. is utilizing breakthrough TDD technology to let the sun shine in where it was never before possible. •





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