

## EARTH'S FLAME:

# A Cleaner, Greener *Alternative*

by SHARON SANDERS

In 1955, Joe Leighton changed the hearth industry forever by inventing the first Blue Flame log lighter and gas valve, replacing paper and kindling for igniting wood in a fireplace. His invention brought gas into wood-burning fireplaces for the first time. Today, his daughter, Lisa Leighton, is heading a project called Earth's Flame that has the potential to make an indelible mark on the hearth industry once again. This time, it's all in the name of the environment.

"Wood-burning fireplaces are in danger of becoming extinct, in many areas of the country, because of their impact on the environment," Leighton says. Growing up working in her father's company (Canterbury Enterprises in Corona, California), she has always had a place in her heart for the hearth, but she has a love for the environment as well.

There are about 38 million wood-burning fireplaces in the United States, and they are emitting 70,000 tons of harmful pollutants into the air every year, Leighton reports. She finds this troubling.

### FROM BLACK TO GREEN

"I feel that it is my calling to help find a solution to the problem," she explains. In 2009, Leighton teamed up with Durango, Colorado-based air-emissions expert Steve Marple to develop the technology that was needed to launch her environmental project.

Before they started the development process, Leighton and Marple met with the leaders of the Hearth, Patio & Barbecue Association (HPBA) and the EPA to discuss the facts: Millions of wood-burning fireplaces in homes across the country are polluting the environment, and the hearth industry needs to come up with a solution. Collectively, they came to the conclusion that the only viable option was to create a retrofit to reduce emissions.

"Since my dad's company originated the Blue Flame gas log lighter and valve, it made sense that we spearhead the effort to develop a product to satisfy the requirements of the EPA and air-quality districts," Leighton says. "I felt that my dad was passing the torch to me to turn wood-burning fireplaces from black to green."

Just one year after their initial meeting with the HPBA, Leighton and Marple completed a prototype of a retrofit that they call Earth's Flame. To their surprise, it not only was well received by the industry, but was given the Vesta Green Award for innovation and design, in March 2010, at HPBExpo in Orlando, Florida. "I believe that Earth's Flame has the potential to make wood-burning fireplaces a part of the green movement," Leighton says.

### A NEW CONCEPT

Earth's Flame is a concept unlike anything that the hearth industry has ever seen. Traditional emissions-reducing products focus on removing the pollutants from a poorly burning fire; the Earth's Flame product addresses the source of the fireplace emissions: a poorly burning fire.

The product's hybrid clean-burn technology features a gas-enhanced combustion system combined with an emissions-reducing grate that reduces fireplace emissions up



The industry's first hybrid, clean-burning fireplace grate, by Earth's Flame, is turning wood-burning fireplaces from black to green.

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to 78%. With actual emissions of 2.7 grams per kilogram, it is the cleanest-burning retrofit in the open-hearth industry. Its output is well below the phase 2 emissions level of the EPA's voluntary wood-burning fireplace program (5.1 grams per kilogram).

Besides reducing emissions, Earth's Flame improves the overall performance of a fireplace, providing double the radiant heat while improving fireplace draft and indoor air quality. Unlike other retrofits, Earth's Flame has no catalyst to replace, so it is able to remove fireplace emissions with the same efficiency for every single fire, throughout its lifespan. Made in the United States, Earth's Flame is constructed of stainless steel and can be installed easily in almost any low-mass or masonry fireplace, as well as in new construction.

### A PASSION FOR THE FUTURE

Leighton is excited to see what's on the horizon for Earth's Flame and is confident that it can truly help clean up the environment. The company shipped its first products to retailers in October 2010, and it is focusing on rais-

ing public awareness of the emissions crisis—and the fact that all owners of wood-burning fireplaces can now do their part to protect both the environment and the health of their families.

Earth's Flame is planning to offer a burn credit to dealers who are willing to demonstrate the capabilities of Earth's Flame on their showroom floors. The company has joined forces with the Arbor Day Foundation to plant trees and replenish forests in dealers' names when they purchase Earth's Flame products.

Leighton will be working with government agencies to create a tax credit/rebate (similar to the existing wood-stove tax credits) for wood-burning products that reduce emissions. "We are a little company with big plans," she says.

In October 2010, the company moved its distribution operation from California to Durango, into a state that has a strong focus on the environment. "By purchasing our products, dealers will be a part of the green movement, while at the same time, they will be helping to preserve the U.S. tradition of wood-burning fireplaces," Leighton says. ■