

## ENVIROHAVEN CORP.





# ENERGY-EFFICIENT HAVENS

ENVIROHAVEN CORP. DELIVERS SOME OF THE MOST SUSTAINABLE HOMES IN THE UNITED STATES THROUGH A GROWING NETWORK OF BUILDERS.

SUNCREST BUILDERS INC. founder and President Greg Bischoff has always had a passion for sustainable and energy-efficient design. The first home he designed and built in Truckee, California, in 1982 is essentially a two-story, earth-sheltered, passive solar custom home. The design maximizes the warm air that rises to the top floor, circulated through cinderblock channels lined up under the bottom level. The home was simple and cost-effective to construct. Low energy costs allowed his young family to live extremely comfortably with minimal heating costs in the nation's fifthsnowiest town. Bischoff's passion for sustainability eventually led to the 1992 founding of Suncrest Builders with his wife

Together, they design and build custom homes with a focus on giving their clients more value for their investment by leading a

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design and engineering team that will maximize usable space with fewer, more cost-effective building materials; reducing energy consumption through creative design in addition to innovative building materials.

"Although the green building movement has been fueling the economic recovery in our industry, we prefer to design for 'holistic sustainability,'" Bischoff says. "Our goal is to create a home for every client that uses fewer resources, not only during construction, but throughout the life of the home. Greater durability and minimal maintenance provide a more comfortable, affordable and esthetically pleasing place to live."

The sustainable ideal that is so fundamental to the culture of Suncrest Builders, was the seed that germinated into the founding of Envirohaven™ Corp., a company that designs and facilitates the construction of housing guided by three basic principles: affordability, durability and hyper-efficiency.

Bischoff utilized some newfound time five years ago, during the housing crisis of the Great Recession, to pursue his dream of developing a home that could capture as many sustainable and green attributes as possible. In order for Envirohaven™ to be a scalable national company, he knew the home would need to be customizable, highly repeatable and provide builders a way to build green and energy efficiently in a time frame similar to production housing. When the economy recovered, Bischoff wanted to

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#### GREG BISCHOFF, FOUNDER

be ready with a home design that would be sought out by consumers, as well as allow him to partner with other builders to complete homes across the United States.

He had an intriguing idea for using the advantages of the geodesic structure, but eliminating the disadvantages (i.e. inefficient use of interior space, inefficient use building materials due to waste, greater builder liability due to the amount of seams

to be waterproofed). The Haven™ design came as a result of adding interior posts to support a 360-degree-view master bedroom in the cupola.

Due to the low surface-to-air ratio of a traditional geodesic home, the Haven™ design possesses inherent strength and energy efficiency, but with fewer building components. The home can be constructed on a foundation and made completely weather tight and ready for drywall in 30 days or fewer with a minimally experienced crew of carpenters and laborers overseen by a general contractor.

The Haven™ home design is the first of its kind by being holistically sustainable and incorporating cutting edge greenbuilding materials. It is so innovative that the U.S. Patent office issued the Bischoff's Utility Patent No. 8,863,447 in fall 2014.

With approximately 30 percent less building materials than traditional rectangular designs, Haven™ homes provide builders an affordable way to offer a profitable product. Due to the innovative building system, builders enjoy 50 percent shorter outdoor construction time and faster project completion times. Centralized and accessible plumbing and HVAC systems of this design have extremely short runs, helping builders to see a reduction in warranty calls.

The exterior siding material is a marriage of magnesium oxide board from Jet Building Products (Most Innovative Building Material in February 2014, at the Interna-

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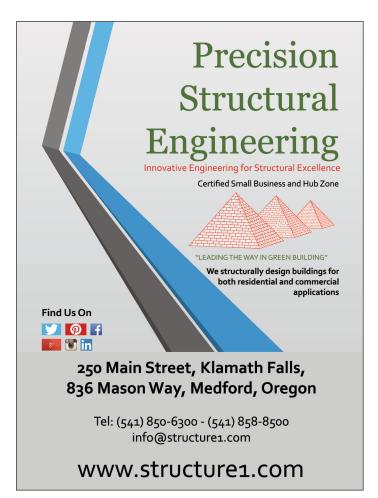




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tional Builders' Show in Las Vegas) and StuccoMax by GigaCrete, an innovative stucco replacement that is green, stronger and does not require wire and a house wrap, and so is less costly than conventional stucco.

Arguably the biggest sustainable benefit of the Haven<sup>TM</sup> is its energy efficiency. Less renewable or nonrenewable energy consumption leads to greatly reduced energy bills. The Haven<sup>TM</sup> is a great fit for off-grid and net-zero applications. For those who want to power their home solely from renewable energy such as solar, wind or geothermal, the size of the initial system is reduced, which leads to less maintenance and money invested long term for replacement components.



All of the sustainable benefits of the design are not the only things that set the Haven™ apart from conventional design. Through creative use of space, the model home in Reno, Nevada, illustrates how to maximize nearly every square inch of the home, making a modest size home of 1,600 square feet ( and about 400 square feet of storage) feel spacious, yet cozy.

Being inside the Haven $^{\text{TM}}$  is like no home you have ever been in before.

"We really get a kick out of seeing people's reactions as they enter the Haven™," Bischoff says. "What they thought was small from the outside opens up to vaulted ceilings. Around every corner is usable storage space and great functionality.

It is truly an architecturally interesting home to be in and to live in," he adds.

Although Envirohaven  $^{\text{TM}}$  has seen a great deal of interest for these sustainable benefits from clients and builders in urban areas and neighborhoods with no homeowners association, rural builders with a shortage of skilled labor and limited access to readily available building materials find these features especially valuable.

This spring, other builders are being trained to build Haven™ homes in their local areas. Under the leadership of partner Clint Borchard, the Envirohaven™ sales and marketing team has rolled out a program to drive referrals and sales by featuring local builder partners across the United States.

Now that the northern Nevada economy is in recovery, Suncrest Builders is designing and building beautiful new custom homes once again as well as expanding efforts towards Envirohaven $^{TM}$ .

Suncrest Builders had achieved a large amount of success designing and building custom homes leading up to the economic downturn. The company and its subcontractors have found that their experience building the Haven™ has greatly added to their skills and reputation for developing innovative ways to make homes more efficient and sustainable while incorporating cutting edge design. To offer even more with less is the very essence of sustainability.

Whether Suncrest is building a custom home or a Haven  $^{TM}$ , it always starts with the design – incorporating green building materials, gaining efficiency, minimizing waste and utilizing space. M

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