



SAVE THE WORLD... BY LIVING IN LUXURY.

FREQUENTLY ASKED QUESTIONS

Can't we improve energy efficiency and performance in small steps without completely reinventing the way we build houses?

No! Global warming must be arrested and reversed sooner rather than later to minimize the impact upon the world. Half measures and small tweaks are good, but won't accomplish the big steps we need now.

Real impact on carbon gases demands that homes maximize efficiency and minimize energy use. These stringent demands cannot be met through minor modifications while building out in the weather with scores of workers for months that drag out into a year... or *longer*. High efficiency requires high precision. Breakthrough performance is only accomplished with minute tolerances and precision-engineering as found in a controlled factory environment. Our CAD-CAM construction process shortens the timeline and provides the greatest precision by leveraging the best technology and trained craftsmen. Our energy performance ratings are independently verified.

Approximately 40% of all energy created in the US goes to build and heat our homes. So significant improvement will only come from profound changes to the entire design and build process.

All the really 'green' houses I've seen are small, simple and odd in their design. Don't we have to make big sacrifices to have a real eco-friendly house?

Rethink your assumptions, and you can break those stereotypes.

A green home should be unique, accommodate your lifestyle, and make you feel good. The large investment you make to build your home can minimize energy use and carbon gas release while creating the home you want. At Vireo, we deliver homes allowing our clients to feel good about their living space and about their relationship with the planet. Intelligent design and better building techniques let caring people live in luxury *as they define it*, in a house they love, without high environmental cost to future generations. If what you want is to live in a home that is beautiful, functional, efficient, and in harmony with nature, allow us to provide a new solution. Proven German engineering developed over half a century has quietly answered these difficult issues with houses minimally impacting the earth – that are also a delight to live in.

I hear people talk about 'carbon footprint' all the time. What kind of carbon footprint do Vireo homes have?

Carbon footprint is a direct result of energy usage, which makes the key issue efficiency. American homes are not efficient with energy usage, and even those that are LEED Platinum certified struggle with reducing energy consumption beyond what is typical.

The average U.S. home is designed for a 20-year life span. After that time significant replacement and rebuilding is needed. Vireo homes are built to 100-year standards – a 500% higher performance than the norm – so everything is built to a higher standard; aerospace quality metals and ball bearings, structural loads more uniformly distributed, and solid construction to last for generations. Our homes by design, construction and use require 1/5th or less the energy of the average U.S. home.

The major areas of efficiency we achieve are longevity, precise factory processes, transportation efficiency, rapid site assembly and the actual energy use of our homes over the course of their life. By attaining the lowest impact in each of these areas, we create houses that are carbon neutral or even carbon positive.

Construction sites produce vast amounts of waste. Do your EcoLuxury homes help to minimize waste?

The typical US home built today produces 17% waste. That means that almost 1/5th of the materials purchased and brought to a jobsite end up in a landfill. Vireo homes average 1-2%! Right now the argument in Boulder, Colorado is whether or not a 10% waste mandate is even attainable, and our techniques have already minimized project waste to less than 1% depending on the situation. In our German factory, materials are recycled and reused for insulation and composites. Every single scrap of materials used to construct a Vireo home is used wisely. This attention to EVERY detail is the EcoLuxury difference only we can deliver.

Building a large, luxurious house takes a long time – often many months or even years. What revolutionary improvements to construction timelines do you offer and what are the benefits?

Time is money. Wasting time goes hand in hand with wasting energy.

Construction timelines on Vireo homes are very short, allowing even expansive, luxurious residences to be move-in ready in a few months. This can save a small fortune on the cost of money because interest isn't being paid for years while the house is being built. Banks start making their money from the moment construction starts. By shortening the build time from years to weeks or months, some homeowners count the savings in hundreds of thousands of dollars – a profound hidden savings. Additional savings on labor, planning time, energy, equipment, site services, transportation of workers, cost overruns and many other factors is immense. Weather delays and damage are practically eliminated. Quality jumps up geometrically as the home isn't built by unskilled day labor crews.

Is what a home is made of really that important?

Yes! Allergies, asthma and other breathing disorders, diseases, rashes and other discomforts are commonly linked directly back to the materials found in your home.

Vireo uses all natural, non-toxic materials. The wood in our houses comes from forests consciously managed for over 300 years. Our vendors are carefully selected for their sustainability, integrity and attention to detail. One of the frequent arguments against revolutionizing American construction techniques is that ultra-tight building envelopes will hold the poisons that come from off-gassing in the home. Many rightfully argue that American homes need to leak air in order to clean the bad air from the home, which is necessary when homes are filled with toxic chemicals emitting VOCs. You know that 'new house smell'? It's actually not a good thing! Those chemicals in the air can make you sick. But lack of leaking and minimal air-transfer is no issue in Vireo homes thanks to hypo-allergenic, safe construction materials and organic finishes. We make it possible to enjoy efficiency, beauty and a healthy home.

How do your houses compare on price per square foot to other homes on the market?

Total net costs on a Vireo home are as good or better than the best quality and most affordable homes constructed in the traditional fashion, but to get the whole picture on price you have to look at the real cost of a house over time, not the typical 'cost per square foot' that is often discussed as the single determinant of a home's value. Greater performance with any product logically equals higher price. So the question isn't really answered by discussing cost per square foot, but rather performance per square foot.

To use our current project as an example... 2002 Alpine is listed at \$3.5 million, and that price point offers a significant value when you're buying an iconic home that will last for a century and use a fraction of the energy of conventional construction. In energy savings alone over decades, this home could pay for itself many times over. Space age technology, minute tolerances, and a carbon neutral environmental impact are exponentially more valuable when compared to conventional construction.

Add environment cost to the equation, and the real financial impact of a Vireo home shrinks even farther. Can any of us afford to build a home that doesn't offer significant environmental savings, knowing what we do about global warming? While narrowly defining price by the upfront cost per square foot might make Vireo homes more expensive, the total costs of energy, money, time, life of the edifice, and the cost to the planet make our homes dramatically less expensive.

Your homes are engineered in Germany and shipped to the US. How can it be efficient to transport an entire building from overseas?

The most efficient form of transportation ever devised is an ocean going ship. Less than ten gallons of fossil fuels are used to transport a ton of material from Germany to the US. When we closely examine the wasteful methods used to build a conventional home, including the hundreds of trips each worker makes to and from the construction site, it becomes clear why a house can be transported from Germany and still remain carbon neutral and earth-friendly. We've overlooked nothing in the 4 stages of efficiency in the Vireo system: factory engineering, transportation, site construction and the home's performance over time. Taken in its entirety, depending on variances from project to project, a Vireo home has 1/5th to 1/50th the carbon impact of the average American home and that includes transporting it to the site from Germany.

Luxury and 'green' just don't mix! How can your homes be beautiful and elegant and still be eco-friendly?

Energy efficiency is the short answer... from CAD-CAM design, to precision build processes, transport, assembly and finally a century of energy efficiency. Conventional wisdom says that there are not enough resources to go around, and only suffering and sacrifice will minimize human impact on the planet. Conventionally speaking that may be true, but the EcoLuxury Revolution challenges our assumptions by creating new standards of efficiency and energy use with exceptional elegance and livability. Vireo successfully brings luxury into the green equation. Our homes represent a completely controlled environment allowing appropriate size without wasteful inefficiency.

Ask any other builder if they pressure test their house to 100 pounds per square inch of pressure. Ask them how long they can hold that pressure. Our answer is the difference. Once you have a precision-engineered, impenetrable envelope for a house that can be pressurized to 3 atmospheres, everything changes. Suddenly you don't have to heat and cool the great outdoors. The only air exchange required is for freshness. Our sustainable, organic materials keep you from being poisoned by a tight house, and our precision processes break the rules that force scarcity and simplicity upon us.

Join the Revolution. Save the world by living in luxury.

I've heard the term "green washing", and I've had experiences where companies made crazy promises they couldn't back up. Are your claims legitimate and can you prove it?

Lots of builders today are 'green washing' houses that are traditional with just a few visible green tweaks. It's happening in other industries as well with a wave of advertising for natural, organic and green products. Many of these are not truly green, and we know American consumers are getting cynical about all the wild claims with no proof. Most of the 'green washing' that is happening today in the US construction industry is done by well-meaning people who have unfortunately accepted loose standards and vague terminology.

At Vireo, we give very specific definitions to all of our terms and there is 3rd party verification of the performance of our homes. Everything we claim has been independently measured and certified, from factory systems designed by Porsche, to efficient construction processes, to how our houses use energy and perform over time.

Your homes are built in a factory in Germany. Doesn't that make them prefabricated like modular houses here in America?

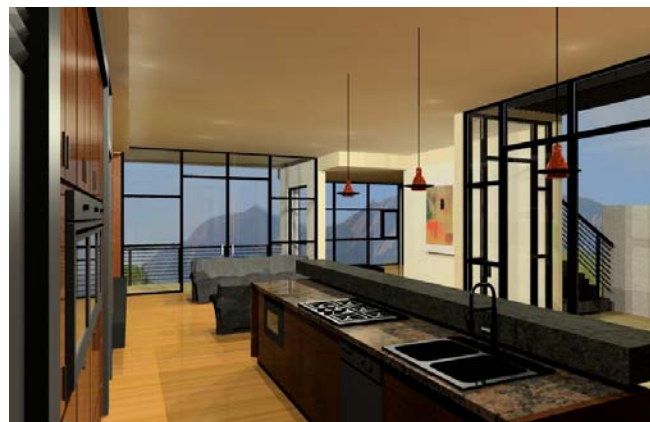
Factory built homes in the US are typically produced that way simply to make more money and not to improve performance. They are built very similarly to the traditional techniques used to assemble a house on-site. German-built homes are completely unknown in North America at this time, so let us explain the differences.

Our precision-engineered homes take advantage of an unbroken chain of quality and control from material acquisition, to location, to equipment, to labor. The entire design and construction process is computerized and minimizes waste, lost time and errors. Build processes at the WeberHaus facility are orchestrated to bring everything together at the same time in one climate-controlled location with laser precision, so even large homes come together in a few short days. The level of quality we demand can only be accomplished under these tightly controlled conditions with the best equipment and the most qualified staff. There are no day-laborers here - and no assembling a house out in the weather over many months with hand tools! Even floor employees at the WeberHaus facility are master craftsmen with decades of experience, and that commitment to precision shows in every facet of the houses we build.

Where can I see an example of a Vireo home?

Right now we are building our first home in the US in Boulder, Colorado!

To learn more about our current project at 2002 Alpine in Boulder, please visit www.2002alpine.com. This home is a stunningly beautiful residence with elegant appointments and extraordinary attention to detail. The first American-designed, urban, hyper-eco-luxury home in America, this 4,300 sq. ft. masterpiece will be completely finished in less than 6 months, and paves the way for a revolution in how we design, build and enjoy our living spaces.



2002 Alpine, Boulder, Colorado

If you have other questions, please visit our blog at www.ecoluxuryrevolution.wordpress.com. You may also contact our outreach liaison below:

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