



\*GREEN living

## building GREEN

Local architects and contractors say environmentally-friendly homes are becoming a mainstream choice.

The design and construction of an environmentally efficient home can be a daunting prospect for homeowners, but the guidance of seasoned architects and builders can make the dream of a "green" home come true. From the choice of flooring and countertops to exterior construction materials-and everything in between-the creation of a home with a low carbon footprint is more possible than ever before. The right experts know how to synchronize energyefficient heating and cooling systems, select earth-friendly building materials, and employ a design and construction plan that works with the environment, rather than against it.

Architects and builders on the Cape and Islands have long incorporated a deep awareness of this coastal region's environmental fragility into design and build plans for both residential and commercial structures. Sharon DaSilva. project architect of Chatham's Polhemus Savery DaSilva Architects Builders (PSD) explains that every house their award-winning team designs and builds reflects the firm's belief in the importance of sustainable living.

"We think of every house that we design and build as sustainable because our homes are so well-built that these structures will endure for generations," says DaSilva. "For a building to more than technical and functional success. If a home isn't beautiful, it isn't sustainable and won't elicit the fondness that will make it a

be truly sustainable—to be useful and loved through generations—it has to be based on home that endures through time."



Referring to a stunning Lower Cape home that was designed with innovative environmentally sensitive materials and a commitment to leaving surrounding woods and meadows as untouched as possible. DaSilva says PSDAB is committed to "building in ways that tread lightly on sensitive land, using natural resources conservatively, yet creatively. We incorporate construction methods and renewable materials that are climate appropriate for New England."

Daniel Lewis, AIA, of Northboro and Centerville, employs hands-on knowledge of green architectural designs and practices to design homes in both the Metro-West and Cape Cod communities. His own home in Centerville is impressively LEED Gold Certified, a certification from the U.S. Green Building Council that rigorously documents and ensures every facet of an environmentally informed home from efficiency to sustainability.



The latter benefit of sustainability explains Lewis, is an important long-term financial gain to homeowners. "People are cognizant of measures to make buildings ecologically sound, but also there are many perks for the homeowners in buildings that are longer lasting and energy efficient because they don't need fixing as soon," Lewis says.

The wide range of eco-friendly materials is broader than ever and is especially valuable in Cape Cod's challenging marine environment. "A lot of my favorite eco-friendly materials to use are exterior ones. Local lumber can be inexpensive and things like fiber cement siding, or cellular PVC trim are all great. These materials are impressive because you don't have to replace or repaint things like that every few years. They are sustainable in every sense of the word," Lewis says.

Sustainable structures with lower energy bills minimize environmental impact. Eco-friendly building is not just

a popular trend for those seeking to reduce their carbon footprint, but also a smart choice for homeowners looking to save money. "Energy codes are getting tighter, so new buildings are more efficient and cost less to heat and cool," says Lewis. The architect also notes that homeowners are beginning to realize that big may be beautiful—but it can also be a burden financially when it comes to energy costs. "For instance, people use to pick the huge marble foyer over a more energy efficient design," he says. "Now we're seeing a switch in taste to smaller, more efficient spaces." Modern design and construction is leaning towards smaller footprints and no wasted square footage.

Chuck Tuttle of REEF Cape Cod's Home Builders in Dennis, says the design and construction firm has been dedicated to preserving the landscape of Cape Cod for years. "Most of the folks who choose to come to the Cape, come for the picturesque nature of this area. They appreciate the beaches, marshes, and ocean; and because of that, they're very interested in protecting it.



We definitely share that interest as a

day homes really have a challenge

in ventilation because of that. The

homes are now so tight that natural

fresh air exchange is greatly reduced.

which don't smell and often

outperform traditional oil finishes.

Matt Teague, REEF's President,

company," says Tuttle.





Guided by Vice President and lead Yarmouth's Fresh Interiors, designer Jim Hagerty, a Certified Inc. offers a variety of eco-Green Professional with the National friendly materials such as Association of Home Builders, these Curava tile options. REEF has experience providing eco-Made from recycled glass friendly construction in the Cape's and seashells, this countertop environmentally sensitive areas with product is maintenance and stain-free, heat resistant, the latest eco-conscious materials. The change in energy codes and is a beautiful choice requires a 30 to 50 percent increase for seaside homes. For in the performance of the insulated more information, visit envelope, Tuttle explains. "Modern freshinteriorsinc.com.

So we incorporate a heat recovery wentilator, which is an air exchange system, into virtually every home we build to bring more fresh air into the furnace system."

In coordination with such technology, REEF also incorporates materials such as low Volatile Organic Compound floor finishes,

Not only has the upfront cost of many materials decreased, but also the long term cost savings can be dramatic, says Kevin Murray of

finds that energy-efficient materials

required with new building codes



Murray Homes, whose work spans the Greater Boston area. "I highly recommend things like cellulose insulation because it is made from 85% recycled paper and it's approximately one-third of the cost of foam insulations. It's also less toxic and less flammable," Murray savs.

Temperature-balanced environments are astrong indication of the efficiency of a home. "There should be no hot or cold spots, or drafts," says Murray. One of the keys to ensuring such sound spaces is proper doors and windows. "I like Low-E glass windows because it reflects heat away in the summer to keep the home cool, but allows heat to enter in the winter," he explains.

Murray says that a great way to recycle materials is to find building materials at architectural salvage yards. We find items that you could never get today, like one-of-a-kind pieces with old-school craftsmanship. I like to use reclaimed antique lumber because it's beautiful and doesn't contribute to deforestation," says Murray.

Sustainable, recycled, eco-friendly and efficient—with the guidance of expert architects and builders, homeowners can explore a vast array of ways to live with the earth, and not just on it.

Erin Murray is an editorial assistant at Cape Cod Life Publications.

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