

GOING "GREEN" ON THE SOUTH SHORE

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THE NEW LOOK OF "GREEN"


Local Companies Look to Eco-Friendly Alternatives



Blue Cross Goes "Green"

The Insurance Company's Newest Office Building on the South Shore Is Environmentally Friendly and Efficient

By Luke O'Neill



Tucked away in a wooded area of Hingham is the Blue Cross Blue Shield of Massachusetts office, a beacon for “green” building design and construction for the South Shore. Nearly a year old, the office building beams with innovative design concepts that could usher in a new way of looking at the region’s development.

The building’s built-in benefits are manifold as Blue Cross, the Boston-based health insurer, expects to reap significant energy savings, boost worker productivity, and harvest a reputation as a good community partner and environmentally conscious employer. In addition, the building helps Blue Cross consolidate and streamline its real estate holdings while providing a central location for its employees.

But perhaps on a grander scale, the Blue Cross building has pushed “green” development into the spotlight for the South Shore while also quietly garnering some praise within the construction industry.

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Situated on the Rockland/Hingham line close to Route 3, the Blue Cross site is set in the back of the Technology Place commercial development, which juts off of Route 228. Located at 25 Technology Place at the end of Commerce Road, the Blue Cross building is essentially enveloped by nature and surrounded by soaring trees. The building's curved wings seemingly emerge from the woods and swoop in from either side to meet at the centered rotunda entranceway. Meticulous landscaping, new plantings, and stately stonewalls all help to beautify the main entrance.

The building's considerable size – four stories, 330,000 square feet – is tempered by the fact that the structure essentially sits in a hillside bowl, which helps to minimize its impact visually as the main entranceway is actually on the second floor with the first floor set at the bottom of the hill. The entire property spans 32 acres.

But perhaps more importantly, with its seemingly limited brickwork and copious tall windows and glass panels accented by a subtle steel framework, the Blue Cross building's sleek design stands as a model of green development and energy efficiency.

Seeing the Light

Even though green development still seems, well, green, and could be considered a new, emerging industry, the Blue Cross building appears to encompass several celebrated and yet lesser-known green design concepts.

The new office, which opened last August, houses the company's claims operation services with about 1,000 employees and space for approximately 400 more. According to Don DiPanfilo, vice president of corporate real estate and administrative services at Blue Cross, the company looked to incorporate three main elements into the building: good air quality, access to natural light, and smooth integration into the natural surroundings.



AIR APPARENT: Blue Cross Blue Shield's new building has incorporated high-grade air quality, among other elements, to maintain employee productivity, says Don DiPanfilo.

Photo/Gary Goodman



NATURAL LIGHT: The Blue Cross multi-purpose room is bathed in pure light.

Photo/Frank DiCesare

“We decided to go green because the health and productivity of our associates is important to us,” says DiPanfilo. “Anything we can do to increase the productivity of our associates is important because it improves the efficiency and quality of service we provide our members. In addition we want to be environmentally friendly and be a good corporate citizen and those are the main reasons we went this route.”

With the building's operational efficiencies and sustainable design, Blue Cross expects to save 25 percent on energy costs, as well as reap the benefits of property ownership.

A big component to the building's green design is the use of natural light and a “light harvesting program” in which the indoor artificial lights dim as outdoor natural light levels rise and vice versa, explains Dan Perruzzi, a principal at Boston-based architectural firm Margulies & Associates and lead architect on the Blue Cross building.

Well-illuminated workspaces, says Perruzzi, tend to create a healthier and more productive working environment. Ninety-five percent of the building's workstations have access to natural light, says DiPanfilo, adding that the building has few offices, especially on the perimeter, which creates an open atmosphere.

Additionally, one of the building's centerpieces features a wall of windows by the large cafeteria and multi-purpose room,

which welcomes natural light and helps to heat the interior.

A more technical but equally vital green machine within the building is an innovative water treatment mechanism in the heating and cooling system in which water is treated and cleansed with magnets instead of chemicals like in most conventional buildings.

In addition, a state-of-the-art stormwater management system includes detention ponds with vegetation, which helps cleanse the water. So, storm water that's collected from the site is released slowly over time; but as it sits in the detention ponds, it's cleaned out naturally, says Perruzzi.

To cut down on common contributors to mold and air pollutants, the building's exterior wall was designed to eliminate moisture transfer and minimize air infiltration. The "high-performance" exterior wall and windows help to improve energy efficiency and reduce heat loss in the winter and heat gain in the summer, says Perruzzi.

Similarly, adds DiPanfilo, the building's white roof helps to cut down on energy costs by reflecting heat. Also, deep window overhangs on the exterior walls help reduce heat gain and air conditioning loads.

Inside, the use of several renewable resource materials and other products which have low volatile organic compounds, like the floors, paints, and sealants, help to eliminate "off-gassing," which contributes to poor air quality.

Taking the LEED

All of these green design concepts, among others, helped the Blue Cross building become the first green building on the South Shore to receive a Silver Leadership in Energy and Environmental Design (LEED) certification, a recognition it just received in mid-May.

The LEED program, developed by the U.S. Green Building Council, requires that a green building meet certain standards involving human and environmental health, sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality.

The four levels of LEED certification are Certified, Silver, Gold, and Platinum, according to DiPanfilo, who adds that Blue Cross was not necessarily seeking a higher certification because of the costs associated with it. Yet he also feels the company didn't necessarily



POSITIVELY GREEN: Dan Peruzzi, architect at Margulies & Associates, says using even the most basic green practices can create a positive workplace atmosphere.

Photo/Gary Goodman

make any compromises in the design.

"I think a lot of the things we did were best practices that we wanted to do anyway," says DiPanfilo. "We're a nonprofit and we didn't want to go to, say, Platinum, which would be spending a lot more money. So I don't think we compromised anything that we didn't want to do."

Blue Cross's Quincy building, also LEED certified, was renovated a few years ago by Margulies & Associates. That building, combined with the Hingham project, made for vast green design space for commercial applications, says Perruzzi.

"Both those projects try to be quiet about the fact that they are green buildings," he says. "I think part of the charge from Blue Cross is they didn't want it to feel different from other projects they've done. They wanted it to fit in visually with their standards, but they wanted it to be green. So that was the challenge – to make the green part not so visually obvious."

Another green development tactic the Blue Cross building tackled was the reuse and recycling of land cleared to make way for the building. Specifically, rock blasted from the site was reused in the retaining walls current-

ly on the property. And although developers tried to limit the number of trees taken down, the ones that were removed were logged, ground up for mulch, or sent to a biomass energy generation plant.

The project also adopted an extensive recycling program in which approximately 90 percent of the waste removed from the site was diverted away from landfills and sent to recycling centers.

"Everything that was cleared off the site was used," says Perruzzi.

Additionally, what helped limit the amount of land consumed was the decision to build a five-story parking garage on the site, says Buzz Constable, project executive for the Blue Cross building and executive vice president of Boston-based A.W. Perry, Inc., the developer of the property. Some 15 to 20 acres of additional land would have been cleared out if developers decided to build a flat parking lot, he says.

"That's a very important part of the complex," Constable says of the 1,184-vehicle garage.

In addition, Blue Cross has also developed a transportation management associa-

tion, which includes shuttle service to the MBTA station in Braintree, which helps limit the number of cars on the road. The company is now branching out the transportation services to the Hingham/Rockland area and is looking to expand it further.

Fiscal Savings

Blue Cross says its Hingham site serves as the “anchor” for the company’s South Shore real estate strategy of moving away from four leased properties and toward the “fiscal savings of property ownership.” The insurer now owns two properties on the South Shore, which has helped consolidate offices, DiPanfilo says.

“And being a nonprofit, it made sense for us to do this for ownership purposes; it’s fiscally advantageous,” he adds.

So what can other businesses, small and large, learn from the Blue Cross building? Perruzzi offers a few ideas:

“My point to anyone who looks at the Blue Cross building is that you can do good for the environment, you can do good for the people who work in the building, and you can do good for your own individual bottom line by employing those green practices – so there’s really no reason not to do it,” he says.

Even by employing some of the more basic green and sustainable design practices, like the use of natural light or using “low-emitting materials,” says Perruzzi, a company can help create a healthy and positive indoor environment for its workers.

“You can provide a project that’s both successful from a financial standpoint and from the standpoint of the user if you use green design aspects in the process,” he says. “And at



BUILDING UP, NOT OUT: A five-story parking garage limited the amount of land consumed on the property, says Buzz Constable, executive vice president

Photo/Gary Goodman

the end of the day the success is measured in terms of dollars saved in energy costs but also in terms of satisfaction. The level of satisfaction on the part of the employees in the Blue Cross building is very high.”

As for the current general state of green building and its future, those people familiar with the construction practice see it as a substantial growth industry.

“A lot of towns and cities now are pushing for people to go that direction,” says DiPanfilo. “And I believe down the road that the codes will be changed to reflect what’s required by the U.S. Green Building Council. [In the future] it just might be a natural thing to do.”

And in just a year’s time, the Blue Cross building has helped keep the green dream alive.

“Particularly in a new industry, and I think the green development industry really is a new industry, every major project pushes the whole industry along,” says Constable. “The Blue Cross building provides a lot of momentum toward the acceptability of green development from scratch. This was a very large building to do this, so that’s really important, it pushed the system along.”