

GREEN WIRED King of Prussia building in Pennsylvania combines top industry trends to create perfect synergy

DIANA MIREL IS A CONTRIBUTING WRITER TO JPM. SEND QUESTIONS REGARDING THIS ARTICLE TO MARKISAN NASO AT MNASO@IREM.ORG.

The relationship between green building and cutting-edge technology may not be immediately obvious. But recognizing the synergy between these two modern-day essentials makes good building—and good business—sense.

In King of Prussia, Pa., a perfect union of environmental responsibility and technology can be found at 1000 Continental Drive.

PLANNING FOR GREEN

The LEED Silver office building at 1000 Continental Drive is comprised of 200,000 square feet and sits on 5.5 acres. The building was not originally intended as a LEED project. But once the slab and steel were in place, BPG Properties tweaked its plans to pursue LEED certification through the U.S. Green Building Council (USGBC).

“We try to create buildings that can be operated more sustainably and intelligently,” said Nancy S. Cleveland, JD, LEED AP, senior vice president and director of sustainability for BPG Properties, Ltd. “When we looked at what we were traditionally doing in terms of responsible and innovative ways to enhance the integrity of our buildings, LEED was the next logical step [as] a way of enabling us to validate what we were doing.”

A detailed energy model derived from vari-

ous areas of the building was utilized to achieve an estimated energy cost savings of 16 percent. With floor-to-ceiling windows making up the entire exterior of the building, the property’s use of natural light is one of the highlights of its energy-saving solutions. Tenants have the option of daylight harvesting, which is possible via perimeter lighting and sensors that run along the windows of the building. These sensors intelligently adjust the mechanical light provided to the space.

“Daylight harvesting can be as simple as a daylight monitoring optical that reads the amount of daylight coming in through the windows, and then adjusts to the level of light coming from your light fixtures so you have just enough light fixture light combined with daylight to reach the set amount of lighting for your space,” explained Cleveland.

To further utilize natural light, the building was designed to provide access to the outdoors through its views. BPG even put together a view plan to guide tenants on how to lay out their office spaces to give more people views of the outdoors.

“If you have ever worked in a [cubicle] with no windows, you know how important [views] are for a sense of well-being,” Cleveland said.

The property is also designed to significantly reduce water usage—by about 46 percent—through the use of low-flow or no-flow plumbing fixtures and green landscaping.

CUTTING-EDGE CONNECTIVITY

1000 Continental is also a leader in cutting-edge technology, which benefits both the building management and the tenants. The intelligent building design supports integrated building controls and advanced IT solutions with a fiber-optic system that uses PoE technology. This technology essentially allows for real-time moni-

1000 CONTINENTAL DRIVE IN KING OF PRUSSIA, PA. WAS CERTIFIED LEED SILVER IN 2007.



toring of a variety of systems on a single platform through a Web-based portal. In near real time, management is able to monitor telecommunications and Internet facilities, HVAC, lighting, security and life safety in the core and shell.

“Technology complements green building because it gives you the tools you need to measure [building performance],” Cleveland said. “You can’t manage something you can’t measure. So with a very refined tool for measuring your energy consumption, you can actually see what it is doing and do something about it.”

All of this can also be extended to the tenants.

“If a tenant elects to tie into that, we can give them a portal to that Web space, so they can monitor their systems in the tenant space as well,” Cleveland said. “This allows tenants to really fine-tune control of what is going on in their space and go beyond just turning the heat up and down.”

The robust, single-platform system makes it easier to keep track of what is going on with multiple systems in the building.

“You can more easily automate and fine-tune things like building operating schedules, routine maintenance, energy consumption monitoring, etc.,” Cleveland said. “You can adjust and readjust operations easily and provide multiple parties with desktop access for ease of monitoring even when they are away from the building.”

The building’s technology further complements the green design by virtually eliminating the need to run copper cabling. This design has reduced copper cabling by 65 percent and is projected to save 52 percent in tenant spaces.

“It is basically a plug-and-play system where the tenant doesn’t have to run its own lines back to the main source in a core conduit in the building,” Cleveland said. “They just run from their own space to a plug-in.”

SUSTAINABLE OPERATIONS

To operate the building sustainably, the management team trained its staff in the green systems and hired vendors well-versed in environmentally conscious waste policies, purchasing and



green cleaning.

“A lot of these things contribute positively to the environment, [to] the corporate mission of tenants and to positive health situations for the employees that work at the site,” said Douglas Hoffman, CPM, RPA, CCIM, president of BPG Management Company Ltd.

Green cleaning in particular became a top priority for the management and operations team. To implement green cleaning at the property, the cleaning staff had to be educated on certain green-cleaning techniques and how to use the green-cleaning chemicals effectively.

STAYING COMPETITIVE

BPG recognizes that achieving LEED Silver status at 1000 Continental has helped the company become a leader in sustainable development and design. Their focus on green and technology has given them a competitive edge in today’s fickle real estate market.

“[Tenants] are driving this process as well,” Hoffman said. “A lot of companies and potential tenants we’ve talked to are interested in this. They drive the process from the standpoint of saying ‘this is what we want, this is the type of building we want for our people and we’re not willing to settle for something less.’ That whole philosophy has been ratcheted up substantially, even just in the last year.”

As the demand for green building continues to grow in today’s marketplace, BPG’s sustainable approach has proven to be a successful one. Ultimately, going green has helped the company attract tenants to the property. ■



WITHIN 1000 CONTINENTAL DRIVE, TENANTS HAVE THE OPTION TO ADJUST LIGHT LEVELS AND TEMPERATURE.