

Taking the LEED

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As I am writing this for the June issue, it is actually April 22 – Earth Day. Earth Day first started in 1970, the same year that the EPA (Environmental Protection Agency) was established. Earth Day heightened the awareness to the concept of recycling, even though the first recycling center was established in New York City more than 100 years prior. By Earth Day 2000, it was reported that one-fourth of all new household products that came on to the market in the U.S. advertised themselves as “recyclable,” “biodegradable,” “ozone friendly” or “compostable.” From eco-friendly to non toxic, consumers are bombarded with catch phrases related to the green movement. But, what do these phrases and terms mean? Are manufacturers’ claims accurate? And, what are the green metrics?

In response to the green phenomenon that has been snowballing since the first

Earth Day, the corporate world has gone to great lengths to market itself and its products as the greenest of the green. However, there seems to be a lot of “greenwashing” going around. This is a term that is used to describe the act of misleading consumers regarding the environmental practices of a company or the environmental benefits of a product or service. Another catch phrase for “greenwashing” is “environmental whitewashing.” In December, 2007, environmental marketing company, TerraChoice, gained national press coverage for releasing a study called which found that 99 percent of 1,018 common consumer products randomly surveyed for the study were guilty of greenwashing.


In the cabling industry, many manufacturers are climbing over each other to gain attention for their “green” products and tout that they can provide the end user and contractors with added benefits, such as LEED points that will lead to reduced energy costs, as well as tax benefits.

However, there are misnomers and confusion over “green” products and “LEED” points. This month’s article will attempt to clarify and define how the cabling industry can participate and gain benefits in the programs that are now taking the building industry by storm.

DEFINING GREEN

Defining green products is very difficult as there are many “gray” areas. Let’s look at a commodity product that is easily perceived as green, such as toilet paper. It is certainly biodegradable, but the “gray” areas are the manufacturing processes, which utilize excessive water and energy which can not be returned to natural resources, without adding pollutants to the environment.

There are several directories of green building products available, such as the GreenSpec™ directory, which is trying to weigh the resource-extraction impacts of one product with the manufacturing impacts of another and the indoor air qual-



Berk-Tek, a Nexans Company, headquartered in New Holland, PA, has many environmentally protective initiatives in place, such as an extensive internal recycling program of all their scrap cable and paper products, energy efficient lighting and an on-site water treatment system.



Ortronics/Legrand in New London, CT, is a global leader in high-performance structured cabling solutions, services, and support. They have been a member of the USGBC since 2004.

As LEED is a fast growing concern to their customers, it is important to understand the LEED Green Building Rating System so that they may educate their audiences as to their involvement.

ity of yet another. So, to become green, not only does the final product need to be environmentally safe and biodegradable, but the processes in which the product is manufactured needs to be documented as eco-friendly, as well.

For the construction and building industry, the CSI Master Format is the "Holy Grail" for building architects, engineers and contractors, with its 42 chapters of formats and standards. The GreenSpec directory identifies and recommends products in each of the 42 chapters of the building process and advises about hazardous products and associated problems that they can cause during the construction process. Specifically related to Division 27 – Communications – there are special recommendations by GreenSpec, such as the cable must be free of heavy metals and halogens (i.e.: containing no chlorinated, brominated, or fluorinated substances). This means that GreenSpec Directory will not include cable products that contain PVC, chlorinated polyethylene, FEP, or brominated flame retardants and that those products will meet the EU (European Union) RoHS standards to be free of lead, cadmium, hexavalent chromium, and mercury, as well as for flame retardants.

BUILDING GREEN

Did you know that buildings in the U.S. account for 65 percent of the total electricity consumed, 30 percent of waste output, 36 percent of energy use, 30 percent of raw materials and contribute to 39 percent of greenhouse gas emissions? Buildings are obviously the leading contributor to a negative environmental impact. As a result, the U.S. Green Building Council (USGBC) was formed in 1995 with ten professionals in the building industry who were concerned with reducing the amount of energy and waste used through building construction (both new and retrofit). Today the USGBC has grown to close to 15,000 members including federal officials, utility managers, architects, property managers, engineers and corporate personnel, who are looking at ways to reduce waste output while conserving energy and natural resources.

The USGBC's mission is "to transform the way buildings and communities are designed, built and operated, enabling an environmentally and socially responsible, healthy and prosperous environment that improves the quality of life."

"Green building design" is the practice of designing a building that aims to reduce its energy use and its consumption of

the Earth's natural resources. In addition to being healthier for the environment, a green building also creates a healthier and more productive environment for its occupants. Some of the key benefits of a green building are:

- Improves quality of life;
- Lower electric and water utility costs;
- Efficient use of building construction materials;
- Enhanced health and productivity for a building's occupants;
- Lower operating costs and increased asset value;
- Reduced environmental impact, such as reduced waste sent to landfills.

LEED GENERATION

Created and maintained by the USGBC, the LEED Green Building Rating System applies to all building types and highlights cutting edge strategies for:

1. Sustainable site development;
2. Water savings;
3. Energy efficiency;
4. Materials and resources utilization;
5. Indoor air quality.

Within each project category, there is a point/credit structure that corresponds, quantifies and aims to reduce the negative impact of a building on the environment its occupants. Realizing that each building scenario and market is unique, there are currently nine different LEED Rating Systems in various stages of development: new construction; existing building; commercial interiors; core & shell; retail; healthcare; schools; home; and, neighborhood development.

Projects seeking LEED certification are required to submit to third-party verification, to assure that every building project meets the highest green building and performance measures. Depending on the number of points achieved, the building can achieve different levels of certification. The high-

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er the amount of points, the more the savings in waste and operating costs will equate to. The four levels of LEED certification are; Platinum (52-69 points), Gold (39-51 points), Silver (33-38 points) or base LEED certified (26-32 points).

LEEDING THE WAY

The biggest fallacy currently in the marketplace is that the LEED Green Building Rating System or USGBC endorses or will give points for actual products. This is emphatically not correct. The USGBC directly specifies that “The USGBC does not certify, endorse or promote products, services, or companies, nor do we track, list or report data related to products and their environmental qualities.” LEED is a rating system that is concerned with the environmental performance of buildings based on overall characteristics of the projects and the project’s ability to meet the performance standards set forth in the LEED Green Building Rating System.

Therefore, if a manufacturer touts a

product as being LEED-certified, this is untrue. However, a product can contribute towards a building’s sustainability, which in turn, could add help with LEED points for a given project. In the cabling industry, careful attention can be given to the “materials and resources” section, in which cable can be redirected from waste to being recycled back into manufacturing, such as plenum or limited combustible material. Smaller diameter cable will allow for better airflow (such as in a data center) and can promote better airflow and quality. And, the section on “innovation in design” allows the architect to use cabling to control networking, lighting and environmental control, which would aid in energy savings.

If you are concerned about the environment and being green, watch out for “greenwashing” and popular marketing misconceptions. Do not be fooled by the “green sheen,” which is the term used to describe organizations which attempt to appear that they are adopting practices beneficial to the environment. As a professional in the cabling industry, join the USGBC; educate yourself

and your customers on the LEED Rating Systems and sustainability practices.

For more information of the USGBC, contact: www.epa.gov/greenbuilding, www.buildinggreen.com, www.usgbc.org.

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“Reel Time” addresses cable topics including both copper and fiber constructions, applications, installation practices and standards updates. If you have a particular cable issue, please send an E-mail to: carol.oliver@nexans.com and we will feature the solution in an upcoming issue.