

GE-CIA Collaboration Reveals Future with Flexible Paper-thin OLED Technology

GE's ongoing development of a revolutionary, energy-efficient light source of the future—flexible, paper-thin, organic light-emitting diodes (OLEDs)—and its collaboration with industrial design students from the Cleveland Institute of Art (CIA) show how truly limitless lighting design and application will become in the years ahead.

"OLEDs hold great promise as the next big lighting technology for both commercial and residential use," says John Strainic, Global Product General Manager of Lighting at GE Consumer & Industrial. "Many of these potential applications conceived by the CIA students align nicely with what lighting designers, architects and other thought leaders have told us they want to accomplish with OLEDs."

GE challenged the students to conceptualize designs that would take advantage of two key attributes that commercialized GE OLEDs are expected to feature: flexibility and thinness. This contrasts with the rigid glass form that other companies appear to be pursuing.

Concealed, under-shelf lighting for retailers, flexible signage for advertisers, illuminated stairs for architects, light-up wallpaper for decorators and illuminated safety outerwear for emergency services personnel are just some of the real-world applications that the CIA students envisioned for GE. The students' imaginative perspectives take center stage in a video that GE debuted at LightFair International 2009, a global lighting industry trade show held in New York City in May. It is viewable at www.YouTube.com/GElightingFuture or directly at http://www.youtube.com/watch?v=TYwgjEYzBH4&feature=channel_page.

The CIA students delivered hundreds of concepts that are now under review with product management and researchers at the company's Nela Park facility in Cleveland and at its

Global Research Center in Niskayuna, NY. GE projects its first commercialized OLED products will be introduced in late 2010 or 2011.

STUDENTS SHAPE THE FUTURE OF LIGHTING

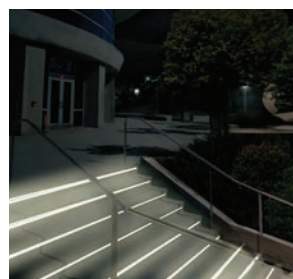
Working with Douglas Paige, Associate Professor of Industrial Design at CIA, and students in a "Future Design Center" class, GE conducted a series of "design ideation" or idea generation sessions. The students were asked to develop feasible application concepts using OLED technology.

The first semester of the class focused on research, ideas and concepts. Students in the second semester picked up where students from the first semester left off. The second semester involved refinement, modeling and prototyping phases, as well as final product recommendations.

Matthew Beckwith, Designer in Residence at CIA, says part of the process of understanding the client's challenge is to go out in the world and find out what has already been done and what has been successful. "It's really important to get the students hands-on to make their ideas relevant," he notes.

Beckwith says the GE team, led by Jason Raak, GE's OLED Program Marketing Manager, pushed the students to think freely and conceptualize without limits or concern about viability. Beckwith notes, "Our approach allows crazy, big ideas to surface before the class shifts gears and begins to craft all that creativity into something that's relevant for a client, and ultimately, consumers."

"Year after year, a primary objective of the class is to put our industrial design students in a consultative role with area companies," says Paige. "Our work with GE was a perfect marriage." **RO**





CEA Honored for Environmentally Helpful Employee Benefits

CEA RECEIVES THE INCENTIVES AWARD FROM COMMUTER CONNECTIONS

The Consumer Electronics Association (CEA)[®] was honored at the National Press Club by Commuter Connections, a program of the National Capital Region Transportation Planning Board at the Metropolitan Washington Council of Governments. Because of the outstanding program offered to CEA employees, CEA won the Connections Employer Recognition Award for Incentives.

"We have proactively implemented programs and benefits that encourage employees to use alternatives to driving. We also support telecommuting and flexible work arrangements," said Gary Shapiro, CEA President and CEO. "The Washington metropolitan area is where our employees work and live; we believe it is important to work together to help protect this environment."

CEA's telecommuting and alternative transportation programs have significantly reduced the impact of commuting on the environment. According to the calculations provided at CommuterConnections.org, CEA's employee benefits have encouraged the reduction of total annual commuting miles by almost 500,000 and saved over 25,000 gallons of fuel.

CEA offers a diverse menu of benefits to its employees to encourage these commuting savings. Currently, 40 percent of CEA employees take advantage of these benefits and use an alternative method of transportation to commute to CEA's Crystal City location, a location chosen in 2007 specifically because it is near public transportation.



CEA benefits include compensation for employees who carpool, public transportation subsidy, bike storage, telework options and a fully equipped gym with showers and changing facilities. Also in 2008, to decrease commuting by its employees, CEA created a mortgage assistance benefit of up to \$25,000 for employees to use as an interest-free forgivable loan to buy a home in Arlington County.

Since this program's inception, ten employees have taken advantage of this financial assistance and moved closer to work, thus reducing their commuting time.

"We are pleased to receive this honor," concluded Shapiro. "We know many of these benefits help save our employees' time and money and will have a long-term positive impact on our environment."

ABOUT CEA:

The Consumer Electronics Association (CEA) is the preeminent trade association promoting growth in the \$172 billion U.S. consumer electronics industry. More than 2,000 companies enjoy the benefits of CEA membership, including legislative

advocacy, market research, technical training and education, industry promotion and the fostering of business and strategic relationships. CEA also sponsors and manages the International CES—Where Entertainment, Technology and Business Converge. All profits from CES are reinvested into CEA's industry services. Find CEA online at www.CE.org. **RO**

Ensuring Facility ADA Compliance



GUARD DOG™ CORD PROTECTOR

CROSSGUARD™ RAIL BARRIER

Ever since the Americans with Disabilities Act (ADA) went into effect on January 26, 1992, it has dramatically improved the lives of disabled individuals by working to make all public places in the United States both accessible and hospitable to those with disabilities. But even though the ADA has greatly helped in achieving a better quality of life for disabled people over the past 17 years, the changes didn't happen overnight, and are, in fact, still underway today.

It's important to realize that ADA compliance is a process, with requirements that must be considered on an ongoing basis. Here are a few guidelines:

PARKING

One of the most recognizable hallmarks of the Americans with Disabilities Act, designated handicapped, or accessible, parking is a key convenience for disabled people who aren't able to traverse moderate to long distances through parking lots. Whether you're constructing a new facility or currently occupy one

that hasn't been fully updated to ADA standards, be sure that your parking area meets the following guidelines:

- To determine how many parking spaces should be designated for disabled clients, customers, or employees, consider the total number of parking spaces your facility has. The general rule of thumb is that 1 parking spot in every group of 25 or fewer spaces needs to be handicapped-accessible. That would mean dedicating 1 accessible spot per every 25 or fewer spaces, 2 accessible parking spaces for lots ranging from 26-50 spaces, etc...
- Each accessible parking space must be marked with a sign bearing the international symbol of accessibility.
- Accessible parking spaces should be the ones closest to a wheelchair-accessible entrance, and be located on level ground that is free from potentially dangerous sloping.
- Accessible parking spaces should be bordered on the

right or left by a clearly marked access aisle, which allows disabled individuals plenty of room to enter and exit their vehicle, and comfortably transition to a wheelchair or other mobility device. Access aisles for van-accessible spaces should be at least 8 feet wide, while those adjacent to car-accessible spaces should be 5 feet in width.

- A flat, stable, slip-resistant, stair-free accessible route must lead from each access aisle to the nearest accessible building entrance. If the access route must cross through an area with vehicular traffic, a marked crosswalk should be provided.

ENTRANCES

The most vital element of an ADA-compliant facility is an accessible entrance, without which many disabled people would be prevented from entering your business or facility. One of the key actions in creating an accessible entrance is to remove any and all stairs leading either up or down to entrances—even a single shallow step can be enough to discourage, or make impossible, the entry a person who is wheelchair-bound or has other mobility limitations. Here are some additional guidelines to follow in the creation of accessible entrances:

- If your facility has more than one entrance, they don't all have to be accessible. However, all non-accessible entrances must have clear signage directing the way to the nearest accessible entrance.
- In multi-entrance facilities, accessible entrances must be left open or unlocked during business hours. If an accessible entrance needs to be kept locked because of security concerns relating to its location, it must be equipped with an intercom or doorbell so that staff can be made aware when someone needs to use the entrance. In such cases, the intercom, buzzer or bell needs to be mounted at accessible level, no more than 4 feet above the ground.
- The removal of steps generally results in the installation of ramps or lifts. If you'll be replacing steps with a ramp, the ramp should have as shallow a slope as possible, never exceeding a rise/run ratio of 1:12.
- If the slope of a ramp is 1:20 or steeper and its total vertical rise exceeds 6 inches, the ramp must be equipped with handrails, both for the stability of those traversing the ramp, and to prevent people from falling off – or rolling over – the edge.
- If possible, grade the ground adjacent to a ramp to match the ramp's slope – this prevents steep drop-offs, and increases the overall safety of the ramp.
- All accessible ramps must be a minimum of 36" wide.

- Don't overlook door hardware. Any type of door handle that requires tight grasping, twisting, or use of a thumb-latch can present an entry obstacle, particularly for people with mobility issues or arthritis. Lever and loop handles are the easiest types for everyone to use, and are excellent choices for accessible entrance hardware.
- Large stores, entertainment venues, and other facilities equipped with turnstiles and/or security gates should be built or modified so that people who use wheelchairs, canes, crutches or walkers can easily enter and exit. Suitable options include removing a turnstile, implementing an accessible turnstile, or providing an accessible gate adjacent to existing standard turnstiles.

CORD COVERS AND RAMPS

Ramps may play a key role in creating accessible entrances, but they're also an appropriate, and often necessary, means of helping those with disabilities to safely and successfully cross ground and floor obstructions like cables, hoses and air lines. In cases where such objects need to be routed across halls, pathways, and other public-access areas of your facility, maintain ADA-compliance in the following ways:

- Cover extension cords, data cables and hoses with a low profile, heavy-duty cord cover that complies with ADA standards, such as the Guard Dog™ 5-Channel Low Profile Cord Protector.
- If the low profile cord protectors mentioned above aren't appropriate for your application, use standard heavy-duty polyurethane cord protectors that can be connected to ADA-compliant ramps. We recommend gently sloping, slip-proof Cross-Guard™ Access Ramps, which easily connect to several different types of cord covers, and can be fitted with an optional ADA-compliant side rail system added safety.
- In instances where handrail assistance may be needed, rail barriers can be added to ADA-Compliant crossings over cables and hoses.

For a complete list of ADA compliance guidelines, please see the US Department of Justice's ADA Standards for Accessible Design.

*Christina Hansen is a Product Specialist at CableOrganizer.com—a leading eTailer of cable, wire and equipment management solutions including those assuring ADA compliance. She may be reached through the company's Web site located at <http://CableOrganizer.com>. **RO***