CALENDAR

Following is a list of meetings and important events for the code community. If you would like The Code Authority® to consider publishing your upcoming events in this column, contact Doug Schultz, editor, in Northbrook, Ill., by fax at 1+847-407-1265; or by e-mail at Code.Authority@ul.com. Please type "Calendar" in the subject line.

Building Owners and Managers Association (BOMA) International North American Commercial Real Estate Congress and The Office Building Show
June 25–28, 2005
Anaheim, California
For information, visit www.boma.org.

American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Annual Meeting
June 25–29, 2005
Denver, Colorado
For information, visit www.ashrae.org.

National Association of State Fire Marshals (NASFM) 2005 Annual Conference
July 7–10, 2005
Reno, Nevada
For information, visit www.firemarshals.org.

National Association of Housing and Redevelopment Officials (NAHRO) Summer Conference
July 14–17, 2005
San Francisco, California
For information, visit www.nahro.org.

Americas' Fire and Security Expo
July 19–21, 2005
Miami Beach, Florida
For information, visit www.americasfireandsecurity.com.

National Conference of State Legislatures (NCSL) Annual Meeting
August 16–20, 2005
Seattle, Washington
For information, visit www.ncsl.org.

International Association of Plumbing and Mechanical Officials (IAPMO) 76th Annual Education and Business Conference
September 25–29, 2005
Albuquerque, New Mexico
For information, visit www.iapmo.org.

International Code Council (ICC) Annual Conference
September 25–October 2, 2005
Detroit, Michigan
For information, visit www.iccsafe.org.

Underwriters Laboratories Inc.®

Underwriters Laboratories Inc.
333 Pfingsten Road
Northbrook, IL 60062-2096
Telephone: +1-847-272-8800
+1-800-595-9844
Fax: +1-847-509-6235

Underwriters Laboratories Inc.
1655 Scott Blvd.
Santa Clara, CA 95050-4169
Telephone: +1-408-985-2400
+1-800-595-9843
Fax: +1-408-556-6083

Underwriters Laboratories Inc.
1285 Walt Whitman Road
Melville, NY 11747-3081
Telephone: +1-631-271-6200
+1-800-595-9842
Fax: +1-631-271-8259

Underwriters Laboratories Inc.
12 Laboratory Drive
Research Triangle Park, NC 27709-3995
Telephone: +1-919-549-1400
+1-800-595-9841
Fax: +1-919-547-6010

Underwriters Laboratories Inc.
2600 N.W. Lake Road
Camas, WA 98607-8542
Telephone: +1-360-817-5500
+1-800-595-9845
Fax: +1-360-817-6000

Underwriters' Laboratories of Canada
7 Underwriters Road
Toronto ON
M1R 3B4
Telephone: +1-866-9373-ULC or
+1-416-757-3611
Fax: +1-416-757-9540

Underwriters Laboratories Inc.®
333 Pfingsten Road
Northbrook, IL 60062-2096
United States of America

Underwriters Laboratories Inc.®

SPRING 2005

THE CODE AUTHORITY®

A NEWSLETTER FOR THE CODE COMMUNITY

PREVENTING ENTRAPMENT HAZARDS FOR GATE OPERATORS

A regulatory perspective

By Joel Hawk & Howard Hopper

Automatic sliding or swinging gates are found at the entrances of parking lots, garages, storefronts and a variety of other commercial and industrial establishments. In recent years, there has been a significant increase of installations within the residential sector. Ensuring that installers, owners and regulatory authorities understand potential entrapment hazards and take appropriate measures for installation, approval, use and maintenance of these products are important elements in reducing the risk of injury.

UL has worked closely with manufacturers, safety experts and the U.S. Consumer Product Safety Commission (CPSC) to develop requirements that effectively address injury hazards, which were adopted by ANSI/UL 325, Standard for Safety for Door, Drapery, Gate, Louver, and Window Operators and Systems. UL continues its commitment to public safety by actively participating in the standards development process on an ongoing basis to account for new technologies and applications.

UL 325 requires automatic gate systems to have at least two mechanisms to prevent entrapment as well as a sensing device that will reverse the gate if it encounters an obstruction. It also requires a secondary sensing mechanism, such as an electric eye or edge sensor, to be provided that will reverse the gate if an obstruction is detected. These requirements minimize the risk of entrapment when the system is properly installed and maintained.

Continued on page 5

THE LIGHTER SIDE OF SAFETY

Man on the street impressions

By Howard Hopper
Managing Editor,
The Code Authority®

Working for a company like Underwriters Laboratories Inc., with its long history of advancing public safety, provides a great deal of job satisfaction. Our work is usually appreciated and understood in professional circles. However, spreading the word about the good things UL does with those we meet in our personal lives can be challenging.

Cases in point: my new neighbor, "Mike," at a recent block party; the lady sitting next to me on an airplane; and many others throughout the years. The conversations always seem to go as follows: "Who do I work for? Why, Underwriters Laboratories," I say, expecting knowing recognition. Instead, I get a blank stare. "You know ... UL!" The blank stare continues. Finally I resort to, "We test products for safety — you've probably seen the UL Mark on electrical appliances in your home. You know ... a UL in a circle?" Suddenly, their eyes light up. "Oh yes!" they exclaim. "Our toaster has a UL on it." Bingo — recognition! UL: the toaster people!

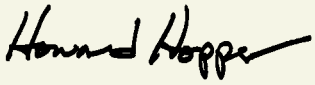
To be fair, some of these folks know that the UL Mark stands for safety. Others assume it's a Good Housekeeping-type of approval. I suspect they think we are protecting them from the hazards of burnt toast or bagels browned only on one side. Others believe we are some kind of government agency, and being known by an acronym (e.g., FBI, IRS, UL, etc.) doesn't help.

But "UL: the toaster people"? This can't be right. People must know what we do — product certification, writing safety standards, Listings ... right? And testing of not only electrical products, but also building materials, fire protection equipment, environmental and public heath services, water quality, RoHS ... they know this, right? I went to THE definitive source for the answer — a Google Internet search. Holding my breath, I entered "UL: the toaster people" into the search field and found ... AARGGHH!

The number one hit was the UL consumers safety page. Oh well, I guess it's only a matter of time before "UL: The Toaster People, Inc." appears on my paycheck.

<Sigh>

For consumer safety tips, seasonal safety campaigns and even toaster safety information, visit www.ul.com/consumers. For information on UL's Restricted Substances Compliance Solutions (RSCS) program, which includes RoHS, visit www.ul.com/rscs.



THE CODE AUTHORITY®

Published by the Regulatory Services Department of Underwriters Laboratories Inc.

A Nationally Recognized Testing Laboratory (NRTL)

A Standards Council of Canada Accredited Testing Organization (TO) and Certification Organization (CO)

Managing Editor
Howard Hopper
Telephone: +1-408-876-2347
Howard.D.Hopper@us.ul.com

Editor
Doug Schultz
Telephone: +1-847-664-1265
Douglas.Schultz@us.ul.com

Address changes and additions
Telephone: +1-847-664-2461
Fax: +1-847-509-6257
Diane.E.Fairchild@us.ul.com

FOCUS ON

EMERGENCY

lighting equipment

Part 1 of 3

By Mike Shulman

In recent months, several questions have been brought to the attention of Underwriters Laboratories Inc. regarding certain types of emergency lighting equipment, including load control relays, control panels and exit signs. This article is the first of a three-part series to provide UL's perspective and guidance for regulatory authorities encountering these situations.

Emergency lighting load control relays (LCRs)

In accordance with building and life safety code requirements, some facilities are required to maintain a minimum level of illumination along the entire means of egress whenever the facility is occupied. The means of egress may be more than just the aisles and main corridors, and may extend from each exit to every location where people might normally be found. Many of these spaces can be unoccupied for considerable portions of the day. Other spaces may require fully dimmable lights to facilitate any activity in the area. The desire to improve overall facility energy efficiency and eliminate potentially unnecessary redundant systems has stimulated an increased demand for LCRs to manage portions of a facility's emergency lighting system.

An emergency lighting LCR is intended to ensure that lighting levels along the means of egress meet the required minimums whenever they are needed but still allow controlled lighting circuits to be dimmed or de-energized at other times. An LCR is supplied by one of the facility's emergency power branch circuits and will always have power available to it (and to its controlled loads). It also concurrently monitors the availability of power to the non-emergency system in the facility. An important issue to recognize is that an LCR does not switch the load between normal and emergency supplies. Load switching of this type should only be performed by a transfer switch Listed in accordance with UL 1008, Standard for Safety for Transfer Switch Equipment. An LCR has only one power input source and that is connected to the emergency power supply. An LCR requires a monitoring signal only (typically voltage) from the normal power source. Most LCRs will also accept and respond to a signal input from a facility's fire (or other) alarm system.

LCRs can be integral to the lighting control (fitting inside a switch box or a lighting control panel) or be installed in parallel with an existing control. A lighting control with an integral LCR would be evaluated for compliance with the applicable requirements from any one of a number of basic standards, such as UL 20, Standard for Safety for General-Use Snap Switches; UL 1472, Standard for Safety for Solid-State Dimming Controls; UL 508, Standard for Safety for Industrial Control Equipment; or UL 244A, Standard for Safety for Solid-State Controls for Appliances. In addition, it would be evaluated for compliance with the requirements of UL 924, Standard for Safety for Emergency Lighting and Power Equipment. The UL 924 evaluation primarily assesses the logic of the LCR to ensure that it will operate as intended, when intended, while the fire and injury prevention features of the device are evaluated through compliance with one of the basic standards noted above. UL Lists LCRs under the product category "Emergency Lighting and Power Equipment (FTBR)." Guide Information for this category can be found in UL's Online Certifications Directory at www.ul.com/database and on page 36 of UL's 2004 General Information for Electrical Equipment Directory (White Book).

Whether integral to the lighting control or installed in parallel, an LCR is designed to override any existing setting (including "off") of its controlled loads and restore them to the output level needed to meet the minimum emergency lighting levels of the facility. For many LCRs, this action may be a simple bypass of a dimming or "off" position, resulting in full output. For programmable LCRs, the emergency lighting level could be less than full output if such levels achieve the minimum illumination levels required for compliance with NFPA 101, Life Safety Code, and have been included in the approved facility emergency lighting and power plan.

In summary, LCRs can play an important role in helping a facility meet the life safety and code compliance goals associated with emergency lighting as well as the economic and environmental goals of increased energy efficiency. LCRs are not transfer switches, but rather bypass or override devices that operate when normal power is interrupted or an emergency evacuation signal is activated.

For more information on LCRs, contact Mike Shulman in Santa Clara, Calif., by phone at +1-408-876-2770; or by e-mail at Michael.Shulman@us.ul.com.

By Rich Walke & Monica Keeler

Perimeter fire CONTAINMENT SYSTEMS

A perimeter fire containment system is a specific construction at the perimeter of a building designed to prevent the passage of fire between floors. The system consists of a floor with an hourly fire endurance rating, an exterior curtain wall with no hourly fire endurance rating, and forming (safing) and fill materials installed within the opening between the floor and the interior surface of the curtain wall. Although the curtain wall is not a fire-rated construction, it must have sufficient structural integrity during a fire exposure so as to retain the forming and fill materials within the opening. This is typically accomplished by the use of high-temperature insulating materials on the interior face of the non-rated curtain wall.

UL certifies these systems under the product category "Perimeter Fire Containment Systems (XHDG)." Guide Information for this category can be found in UL's Online Certifications Directory at www.ul.com/database and in Volume 2A of UL's Fire Resistance Directory. Two hourly fire ratings are defined for each UL certified perimeter fire containment system:

- **Integrity Rating —** A measure of the perimeter fire containment system's ability to withstand the fire exposure test without permitting the passage of flame through openings or the occurrence of flaming on any element of the unexposed surface of the fill material, floor or on the interior surface of the curtain wall above the fill material. In addition, this rating indicates that glazing materials used with the curtain wall system maintained their structural integrity during the exposure.
- **Insulation Rating —** A measure of the perimeter fire containment system's resistance to both flame passage and heat transfer. This rating requires the maximum temperature rise on the unexposed surface of the fill material or on the interior surface of the curtain wall not to exceed 325 F above the starting temperature. For perimeter fire containment systems having a clearance distance of 6 inches or greater between the interior surface of the curtain wall and the floor, this rating also requires the average temperature rise on the unexposed surface of the fill material not to exceed 250 F above the starting temperature.

In the 2003 International Building Code (IBC), the required fire exposure and performance requirements for perimeter fire containment systems are detailed in paragraphs 713.1 and 713.4, but the fire test standard used to establish these requirements is not currently specified. A recent proposal was submitted to the IBC to make reference to ASTM E 2307, Standard Test Method for Determining Fire Resistance of Perimeter Fire Barrier Systems Using Intermediate-Scale, Multi-story Test Apparatus. The addition of this test method reference will more clearly define what criteria should be considered when evaluating the minimum level of acceptance of perimeter fire containment systems.

While the ASTM E 2307 and UL test procedures specify essentially the same test apparatus, there is a significant difference between the acceptance requirements. UL's evaluation encompasses the performance of the forming and fill materials as well as the performance of the curtain wall at the entire upper level of the structure. ASTM E 2307 also addresses the performance of the forming and fill materials, but only evaluates the fire performance of the surface of the curtain wall equal to or less than 1 inch above the fill material. In real-life fire conditions, fire can move from a lower level to an upper level through means other than through the forming and fill materials. Spread of fire in this manner can accelerate deterioration of the building and create a larger potential for loss of life and property. UL's certification program addresses the potential for propagation of fire from one floor to another by evaluation of flaming along the entire interior surface of the curtain wall, including the glazing material. This program should meet and exceed the ASTM E 2307 acceptance criteria.

When constructing and inspecting perimeter fire containment systems, attention should be given to ensure that the system is constructed as shown in the Classified design, and that the perimeter linear opening does not exceed the maximum width specified in the design.

For more information on perimeter fire containment systems, contact Rich Walke in Northbrook, Ill., by phone at +1-847-664-3084; or by email at Richard.N.Walke@us.ul.com.

Preventing entrapment hazards

Continued from page 1

Electrical code considerations

Section 110.3(B) of the National Electrical Code® (NEC®) requires listed or labeled equipment to be installed and used in accordance with any instructions included in the listing. Due to the nature of the injuries associated with this equipment, the installer and regulatory authority should take extra care to ensure that the equipment is not only connected and protected correctly, but also provided with all of the accessories and protective components specified in the manufacturer's installation instructions.

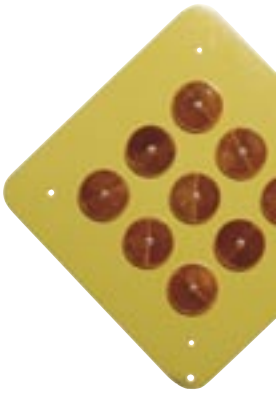
Other model code considerations

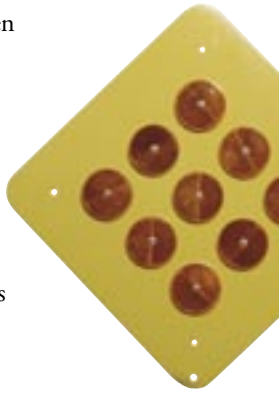
Model building, fire and life safety codes have not yet adopted requirements specifically addressing the installation and use of automatically operated gates. This may make it difficult for building, fire and life safety inspectors to be able to effectively address associated entrapment hazards in their jurisdictions. Changes to these model codes should be considered to support safe installation and use of these products.

UL Lists gate operators under the product category "Door, Drapery, Gate, Louver, and Window Operators and Systems (FDDR)." This category covers electrical and pneumatic gate systems, which include gates, operators and controls tested as complete units. Components of a system are specifically designated in the installation instructions provided with the system. Guide Information for this category can be found in UL's Online Certifications Directory at www.ul.com/database and on page 224 of UL's 2004 General Information for Electrical Equipment Directory (White Book).

While UL certification of gate operator systems addresses entrapment hazards, safety is ultimately dependent upon proper installation, inspection, use and maintenance of the systems. Important safety considerations include:

- Installation should be performed by a qualified installer in accordance with the manufacturer's installation instructions.
- Special care should be exercised during installation of all gate operators to ensure that recommended safety devices, such as photoelectric sensors or reversing edge switches, are properly installed.
- The gate operator should only be used with the gates and accessories described in the installations.
- Initial functional testing of the system should be performed to ensure that the gate operates properly and that the safety features operate when obstructions are present.
- The system should be maintained in operable condition, and repairs, if necessary, should be made using components described in the original Listing.
- Site warning placards and markings should be located according to the installation instructions.
- Performance of routine testing and maintenance of the system.





For more information on gate operator systems, contact Joel Hawk in Santa Clara, Calif., by phone at +1-408-876-2188; or by e-mail at Joel.Hawk@us.ul.com.

UL-ese

Listed, Classified, Follow-Up Services, Category Control Number (CCN), File Number, Recognized Component ... these are just a few examples of the UL-ese spoken at Underwriters Laboratories Inc. on a daily basis. More frequently, these expressions are being used outside the office in publications, during technical conversations and on various Web sites. This column will attempt to explain and clarify UL terminology.

For definitions of other UL terms, visit UL's glossary of terminology Web site at www.ul.com/about/glossary.html. If you would like a UL term added, contact Jill Witt in Northbrook, Ill., by e-mail at Jill.Witt@us.ul.com; or by fax at +1-847-313-2175.

UL certification — UL certification confirms compliance with applicable product safety standard requirements. UL certification encompasses UL's Listing, Classification and Component Recognition Services. Among these, both UL's Listing and Classification Services comply with the definition of "listed" as stated in the North American model codes.

NEWS BRIEFS

In memoriam: Julian Burnside

Julian Burnside, a retired code expert in the Regulatory Services Department of Underwriters Laboratories Inc., died on April 8, 2005. Julian specialized in providing code assistance to the electrical and building industries for over 17 years. During that period, Julian worked closely with government agencies, consultants, architects and regulatory authorities to explain UL's certification work. Julian retired from UL in 1996 and was presented with a lifetime membership to the International Association of Electrical Inspectors (IAEI) for his years of dedication and service.

Julian's expertise, counsel and overall persona will be missed by the members of our electrical and building inspection community.

A Florida Chapter IAEI apprentice scholarship fund is being established in Julian's honor. UL teamed up with local Florida divisions during the Florida Chapter meeting to establish this fund to provide annual financial support for individuals pursuing electrical careers. Additionally, Mark Ode and John Minick will provide a workshop in Florida with all proceeds going towards the scholarship fund.

"Julian was known by the Southern Section as Mr. UL," said Scott Ritchie, manager of UL's Field Services group. "It was a privilege being mentored by such a well respected and liked human being."

"Julian would always provide help for electrical inspectors and contractors on any issue involving UL," added Mark Ode, a UL Regulatory Services Department staff member. "He always had a kind word for everyone."

For more information about the Julian Burnside Apprentice Scholarship Fund, contact Joe Bolesina at 310 Court Street, Clearwater, Fla., 33756; Nelson Montgomery at 1400 North Blvd., Tampa, Fla., 33607; or Rob Sly at 8192 Woodland Center Blvd., Tampa, Fla., 33614.

New security and signaling certification Marks clarify product applications

On May 1, 2005, Underwriters Laboratories Inc. introduced three new certification Marks:

- The UL Signaling Mark applies to products that function as fire and life-safety signaling devices. Typical products include smoke detectors, fire alarm control units and hospital nurse call systems.
- The UL Security Mark applies to products that function as security devices. Typical products include intrusion detectors, burglar alarms, access controls, anti-theft alarms, surveillance systems, safes and vaults.
- The UL Security and Signaling Mark applies to products that serve both security and signaling functions. A typical product is a combination fire and burglar alarm system.

UL introduced these new certification Marks to clearly identify products that have undergone rigorous safety testing as well as an evaluation of their ability to perform security and signaling functions. Products bearing UL Security and Signaling Marks have been specifically certified to UL requirements for signaling and security applications.

"These new Marks will assist regulatory authorities by clearly identifying signaling and security products," said Chris Hasbrook, general manager for Fire Safety, Security & Signaling, and Environmental Sciences business units. "They will help to promote improved product performance and will also give users additional confidence that these products are evaluated for reliability to perform their intended function."

UL's Security and Signaling certification Marks complement the traditional UL Mark as a vital tool for regulators by confirming a product's suitability for specific applications. All security and signaling manufacturers will be required to transition to the new UL Marks by May 1, 2007. During this transition period, regulators can expect to see both the new UL Marks as well as the standard UL Listing Mark on security and signaling products. Any manufacturer new to UL will begin using the new UL Marks immediately.

For more information, contact Chris Hasbrook in Northbrook, Ill., by phone at +1-847-664-1055; or by e-mail at Chris.Hasbrook@us.ul.com.

Regulatory Services has a new toll-free number

In an effort to better serve the regulatory community, the Regulatory Services Department of Underwriters Laboratories Inc. consolidated five previously manned 1-800 numbers into a single toll-free number.

Effective May 31, 2005, **+1-800-595-9844** is the toll-free number that regulatory authorities across the United States and Canada can use to contact Regulatory Services staff members. This toll-free calling arrangement continues to provide regulatory authorities with the same great service you've come to depend on. Option 1 allows the caller to enter a UL representative's five-digit extension, while Option 2 provides the caller with a list of Regulatory Services representatives.

Option 3 allows callers to speak to the "first available" Regulatory Services representative. Manned by staff members at four of our offices, Option 3 provides extended phone coverage to regulatory authorities between the hours of 6:30 a.m. and 5:30 p.m. CST, Monday through Friday.

If you experience any complications with this new 1-800 number, contact Jill Witt in Northbrook, Ill., by phone at +1-847-664-2175; by e-mail at Jill.Witt@us.ul.com; and of course at +1-800-595-9844.

Questions & answers

In this column, Underwriters Laboratories Inc. engineers answer questions concerning UL and its operations, or inquiries about UL Standards for Safety and how they coincide with installation codes, such as the National Electrical Code® (NEC®) and various building codes.

Q: I see a UL Listing Mark on a fire hose assembly that our department recently purchased. Does this Listing cover just the hose or the complete hose assembly, including fittings?

A: Underwriters Laboratories Inc. investigates and Lists both fire hose and fire hose assemblies, and the UL Mark describes the nature of each Listing. If the Mark states, "Listed Fire Hose Assembly," then representative samples of the complete coupled hose assembly have been investigated and found to comply with all applicable requirements in UL 19, Standard for Safety for Lined Fire Hose and Hose Assemblies. If the UL Mark states, "Listed Fire Hose" without the word "Assembly," then only representative samples of the hose itself have been investigated and found to comply with the applicable requirements of UL 19. In this case, the suitability of adding the fittings on the fire hose has not been investigated by UL.

UL 19 includes a comprehensive set of construction and performance requirements for the fire hose, along with additional tests for coupled fire hose assemblies. The fire hose manufacturer may chose to submit only the hose or the complete coupled hose assembly to UL for Listing.

UL Lists both of these products under the product category "Fire Hose and Hose Assemblies, Lined, for Municipal and Industrial Use (MZQE)." Guide Information for this category can be found in UL's Online Certifications Directory at www.ul.com/database.

For more information on fire hose and fire hose assemblies, contact Rich Winton in Northbrook, Ill., by phone at +1-847-664-2676; or by e-mail at Richard.C.Winton@us.ul.com.

Send your questions to: Howard Hopper, Underwriters Laboratories Inc., 1655 Scott Blvd., Santa Clara, CA 95050; +1-408-876-2347; or Howard.D.Hopper@us.ul.com.

WHAT'S NEW @ ul.com

The Regulators page of UL.com (www.ul.com/regulators) was developed specifically for you, the regulatory authority. Here are the most recent additions that we hope you find useful:

Wire and Cable Marking Guide — We revised the Wire and Cable Marking Guide in June 2005. The revisions, contained within Appendices B, C and D, reflect changes made to Guide Information for "Optical Fiber Cable (QAYK)" and "Power and Control Tray Cable (QPOR)." UL's Marking Guides are available at www.ul.com/regulators/index_lib.cfm.

TCA: Electrical Connections — The February, April and May 2005 issues of The Code Authority® (TCA): Electrical Connections, a newsletter published by the Regulatory Services Department of Underwriters Laboratories Inc., are now available online at www.ul.com/tca. Log on today to learn more about a Chinese national sentenced to prison for dealing in counterfeit merchandise, Type NM nonmetallic-sheathed cable, transient voltage surge suppressors (TVSSs), flexible cable for use with stage lighting, a UL anti-counterfeiting success story, self-grounding receptacles, galvanized ground rods and more!

IAEI Question Corner — Learn about safety concerns with Listed neon lighting power supplies, Type NM and Type NM-B cables, Listed signs, and commercial cooking appliances installed in residential applications in UL's Q&A segment from the March–April and May–June 2005 IAEI News magazines. These and other topics are now available at www.ul.com/regulators/iaei.cfm.

IAEI News magazine article (reprints) — Read the recently published article by Deborah Prince titled "AHJs Wanted" as well as an article by Sonya Bird and John Kovacik titled "Global Standard Harmonization" as printed, respectively, in the March–April and May–June 2005 issues of IAEI News magazine. These and other technical articles are currently available at www.ul.com/regulators/index_lib.cfm.

Arc fault circuit interrupters — Do you have questions regarding the response of arc fault circuit interrupter (AFCI) circuit breakers to commercially available AFCI indicators? If so, read the March 21, 2005, news brief titled "AFCI indicators" currently available at www.ul.com/regulators/afci/index.cfm.

New product categories — The "New Product Categories" page is updated monthly and provides a list of newly developed UL product categories added to UL's certification programs for both the United States and Canada. Access the UL Guide Information and current UL Listings and/or Classifications for the following new product categories at www.ul.com/regulators/regulators_new.cfm:

- Optical Fiber/Communications/Signaling/Coaxial Cable Outlet Boxes (QAZR)
- Recreational Vehicle Cable, Low Voltage (ZKRU)
- Pumping Equipment for Fire Service for Use in Hazardous Locations (RAHW)
- Fire Pump Controllers for Use in Hazardous Locations (RCYW)
- Static Neutralizing Equipment for Use in Class I, Zone 0, 1, & 2 Hazardous Locations (VXEO)
- Ventilation Ducts [Fire Resistive Duct Assemblies] (HNOV)
- Optical Fiber/Communications/Signaling/Coaxial Cable Outlet Boxes Certified for Canada (QAZR7)
- Fire Pump Controllers for Use in Hazardous Locations Certified for Canada (RCYW7)
- Pumping Equipment for Fire Service for Use in Hazardous Locations Certified for Canada (RAHW7)
- Exit Signs & Markers for Use in Class I, Zone 0, 1, & 2 Hazardous Locations Certified for Canada (FWDJ7)
- Exit Signs & Exit Appliances for Use in Class I, Zone 0, 1, & 2 Hazardous Locations Certified for Canada (FWDD7)
- Cable Fittings for Use in Class I, Zone 0, 1, & 2 Hazardous Locations Certified for Canada (CYMJ7)
- Finishers of Fire Doors (GSZC7)
- Finishers of Fire Door Frames & Window Frames (GVUP7)
- Composite Panels Certified for Canada [Prefabricated Buildings] (QRSY7)

Articles in Electrical Contractors (EC) Magazine by Mark Ode — Read Mark's latest articles published in EC Magazine: "GFCI requirements expand in 2005 NEC," "Ensuring earth connections," "New method to protect circuits," "Use the service entrance" and "Going for a swim." These and other articles are available at www.ul.com/regulators/ode.cfm.

If there is something you would like to see on the Regulators page, send your suggestions to Jill Witt in Northbrook, Ill., by e-mail at Jill.Witt@us.ul.com; or by fax at +1-847-313-2175.