

# THE POWER TO **PROTECT**

BY LAURA SCHLERETH

Interior designers ensure public health, safety and welfare through steadfast attention to air quality, accessibility, fire safety and ergonomics.



**he role of the interior designer** goes far beyond choosing the color of walls, the texture of fabrics and the material of flooring. But while that's obvious to those in the design community, many outside the circle may be less aware of Interior Designs' reach. The fact is, interior designers are essential to public health and safety in the built environment, just as architects, engineers and construction professionals are. "Public safety is affected in every finish of a space, and [understanding] how these finishes react during normal use, as well as in fires or other disasters, is one of our most important tasks," says Karen Carbo, IIDA, a member of the Louisiana State Board of Interior Designers who works for Blich Knevel Architects in New Orleans.

Beyond that, the decisions interior designers make for any given project – whether corporate, hospitality, health-care, residential, retail or otherwise – affect air quality, building accessibility and fire codes, and ergonomics. For these reasons, it's essential that interior designers "regulate the profession and educate the public as to why it is necessary to hire the appropriate person with the right education and skills to perform the appropriate tasks," Carbo says.

#### CLEARING THE AIR

Air quality is a major concern for interior designers, particularly those with projects in areas prone to extreme heat, pollution or dust storms. These elements force David Stone, IIDA, LEED AP, President of the Interior Design Coalition of Arizona, to pay particular attention to air quality in his designs. "You have to make sure you have proper filtering of the air to remove [dust and particulate matter]," he says. "Otherwise you literally end up with black ceilings near diffusers and a layer of dust on your work surface. This means discussing issues like filter placement and maintenance, and replacement schedules with your engineers, clients and others."

The extreme heat in areas like Arizona makes bringing fresh air into ventilation systems a primary concern. When designing a veterinarian's surgery room, Stone was challenged with ensuring the air would remain clean and colder than typical room temperature, as it's easier to warm up an animal's body if needed rather than cool it down. The twist? Air could not blow directly on the veterinarian or patients during surgery to avoid distractions and the risk of blowing dust or particulate matter into an open wound. Stone's solution, developed hand-in-hand with the mechanical engineers, involved a laminar flow arrangement that blew air horizontally across the ceiling where it would then circulate around the walls, cooling the room without disturbing the

patient. To keep the temperature down, Stone blocked the west-facing exterior window with dry wall from the interior, as the landlord would not allow the window to be removed completely. The design also included easy access to the HVAC units so filters could be changed regularly. That required placing the ceiling units outside the room, as it had a solid drywall ceiling.

In humid areas, the proper materials must be specified to prohibit the growth of mold, says Katherine Setser, IIDA, Legislative Consultant to the Tennessee Interior Design Coalition and Principal at Enterprise Resource Group LLC in Nashville, Tenn. For instance, air and humidity can seep into interiors through cracks, windows and exterior walls. Setser says this can be particularly

problematic in hotels where many interior walls have a vinyl covering. The vinyl acts as a vapor barrier and traps the air and moisture, creating mold build-up and requiring expensive repairs or even hotel closures.

"A qualified interior designer might recommend a perforated vinyl wall covering that doesn't trap air and moisture because it has small holes designed to let the air and moisture pass," Setser says. "Or they might decide to not use a wall covering, but rather a textured paint finish for durability."

#### CRACKING DOWN ON CODES

The National Fire Protection Association reports that the proper interior materials can play a greater role in protecting



## *it all starts in the classroom*

**What better place to begin** focusing on public health and safety than in interior design university programs? Concern for the public well-being is stressed in several required design studios and is reinforced through specific courses at the University of Cincinnati School of Architecture and Interior Design, says Jim Postell, Associate Professor. Throughout the five-year undergraduate program, students learn about circulation and wayfinding, access and egress issues, specification of materials, flame and smoke spread ratings, the measure of a floor's slip resistance, volatile organic compounds and indoor air quality, among other concerns.

At Cornell University in Ithaca, N.Y., Assistant Professor David Feathers teaches the course "Universal Design: Ergonomics and Accessibility," in which he covers Americans with Disabilities Act compliance, accessibility and safety. Professor Alan Hedge, Director of the Human Factors and Ergonomics Laboratory at Cornell, teaches ergonomics classes and a required course on the ambient environment. "The ambient environment class covers the indoor sources and health effects of a wide range of inorganic, organic and microbiological contaminants, as well as dealing with the emissions properties of some materials and the effectiveness of alternative ventilation systems and filtration/air cleaning designs," says Hedge, who, as a member of Cornell's Scientific Advisory Board, also helped develop the Carpet and Rug Institute's Green Label program for interior products.

Mary Burke, of New York's Pratt Institute, says it marginalizes the role of the interior designer to suggest that they have only a secondary role in ensuring public health, safety and welfare. "A properly trained interior designer would address such concerns in an integrated solution from the very beginning, rather than as an afterthought," she says.

life and property during a fire than even sprinklers and fire extinguishers. In fact, in the United States, more than 700 fires each month start because of an ignited interior material, on average, leading to 25 deaths, 500 injuries and more than \$599 million in property damage every year. So the role of the interior designer in specifying materials is more than a job responsibility – it can be a matter of life and death.

In fires, interior materials can help prevent the spread of flames and toxins so occupants have enough time to exit the building. For example, Setser says, commercial-grade carpet padding offers better performance in a fire and produces less black, toxic smoke than the standard residential product.

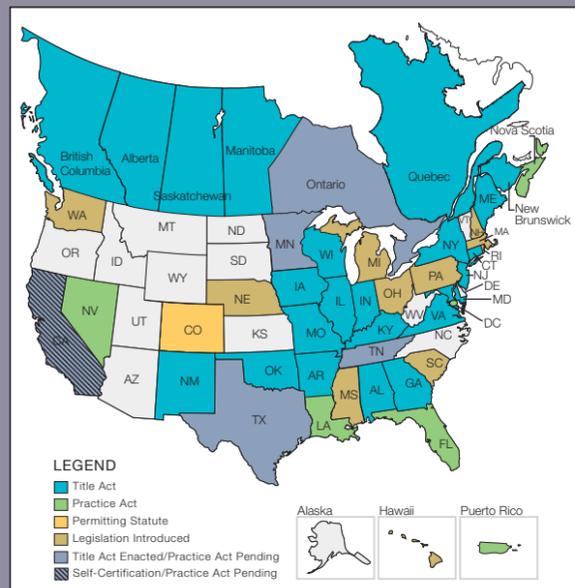
In addition to adhering to building fire codes, interior designers must also consider accessibility codes, a responsibility equally as significant. Adhering to these standards can involve anything from how easily a wheelchair moves on specific carpets or flooring, to signage that must be hung at a certain height and feature contrasting letters and background material, along with Braille. “Millwork, drinking fountains, mirrors, door hardware, handrails, stair treads and food service lines are just a few of the components in a public building that interior designers are required to make accessible,” says Denise Hostick, IIDA, Vice President of GRA-Texas for IIDA’s Texas/Oklahoma Chapter. “It is the designer’s responsibility to notate on their construction plans the correct mounting heights, clearances and materials that meet these requirements.”

But interior designers can go beyond adhering to codes to account for the unique needs of certain spaces, says Lizzy Van Lysebeth, Editor for the online interior design community [www.id-sphere.com](http://www.id-sphere.com) and owner of Lizzy Design, an interior design firm in London. In nurseries, for example, there is no code forbidding the use of pull-up

## protection for the public, responsibility for the profession

Across North America, interior designers and their supporters are working to ensure the public is protected and that those practicing Interior Design are fully qualified and regulated. Interior design legislation gives designers the opportunity to take more responsibility and gain the professionalism they have earned, says IIDA President Derrell Parker, FIIDA, Principal at Parker Scaggiari in Las Vegas and the first licensed designer in the state of Nevada. Licensing ensures regulated interior designers have met the highest standards and stiffest qualifications, he says.

Currently, twenty-seven states, including the District of Columbia and Puerto Rico, and eight Canadian provinces have either practice or title laws to protect the health, safety, and welfare of their residents, and many more have legislation pending. How does your state measure up?



blinds, which can be a suffocation hazard if a toddler grabs the blinds and unravels the cord. Van Lysebeth says going the extra step in situations like these is where Interior Design “finds its strength.”

### ERGONOMICALLY SPEAKING

Designing an ergonomically sound environment can save users from chronic back problems or debilitating conditions like carpal tunnel syndrome. After one of Stone’s colleagues had back surgery, the doctor requested she keep a more upright position. Stone was tasked by his office management to address those needs. After discussions with the furniture manufacturer’s and local dealer’s experts, he and his colleagues changed her chair’s lumbar support and determined the correct desk height by speaking to the furniture manufacturer’s ergonomic expert. They eliminated her keyboard tray so she would be closer to the screen, with her arms and wrists positioned correctly. Even more importantly, they opened her leg, knee and back angles to reduce tension and ease recovery. All these factors helped her achieve better body position alignment to prevent future health problems.

Ergonomic solutions can be rather simple or very complex, as was the case when Van Lysebeth designed an office table to make the work environment as comfortable as possible for users. For the design, he took into account formal and informal contact, as well as the ease users

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—Denise Hostick, IIDA, Texas/Oklahoma Chapter Vice President of GRA-Texas

would have reaching everything on the desk. The table’s rounded contours, rather than straight edges, allow the user to comfortably move and reach for objects. Its asymmetrical shape offers different zones of comfort and allows for both formal and informal contact: Users can sit closer to each other for informal situations like a collaborative project, or sit further apart facing each other for more formal situations like job interviews.

Clearly, as Interior Design’s reach extends even further beyond aesthetics, the stakes are at an all-time high. Having so much influence is a big responsibility, but one on which designers thrive. “If you’re in a profession and want to call yourself a professional, you need to take responsibility,” says IIDA President Derrell Parker, FIIDA, Principal at Parker Scaggiari in Las Vegas. “Public health is far too important for [designers] to not take responsibility for life safety.” ■

