

Shine ON

The lighting industry is aglow with new opportunity

by STACEY MCLACHLAN

Husk pendants from Amerisis Lighting Corp.

It's one of the most powerfully affecting elements of a space, so it's no surprise that designers and engineers put so much time and thought into lighting. We respond to it both consciously and unconsciously – lighting can set a mood, improve our health, or keep us safe.

With more customizable options than ever before and an ever-growing selection of high-end LEDs to suit every need, lighting manufacturers and engineers have an exciting array of possibilities at their fingertips for 2019 and beyond.

ENERGY SMART

As Canadians are increasingly conscious of energy consumption, LED lights have become the standard for those seeking eco-friendly options. "Today, the majority of lighting specified is with LED technology," says Steve Nemetz, CEO and senior principal for Nemetz (S/A) & Associates Ltd.

B.A. Robinson lighting product specialist Jim Ormshaw agrees. "Homeowners are looking for the most efficient type of lighting using the least amount of power – customers are becoming more educated on the topic before even coming into one of our showrooms, and starting to accept that LEDs are here to stay." It certainly helps that the quality of LED products has greatly improved over the past couple of years. "LEDs are becoming more efficient, providing more lumen output with less wattage," Ormshaw adds.

LEDs have also come a long way in terms of flexibility of usage and design options. "Levels of lighting controls are being considered more, such as dim to warm and tunable white and colour changing," says Nemetz. And of course, if these lights look good too, all the better. "Architects are also looking for clean aesthetics along with energy efficiency," says Nemetz. "As the LED technology advances it is allowing for high light outputs in small profiles and is shrinking the size of the fixtures," says Lisa Acosta, president of Amerisis Lighting Corp.

"Increased efficiency has given us the ability to light high ceiling spaces without large bulky luminaires that were once the only option." Small, powerful, and beautiful, today's LED options are an architect's dream.

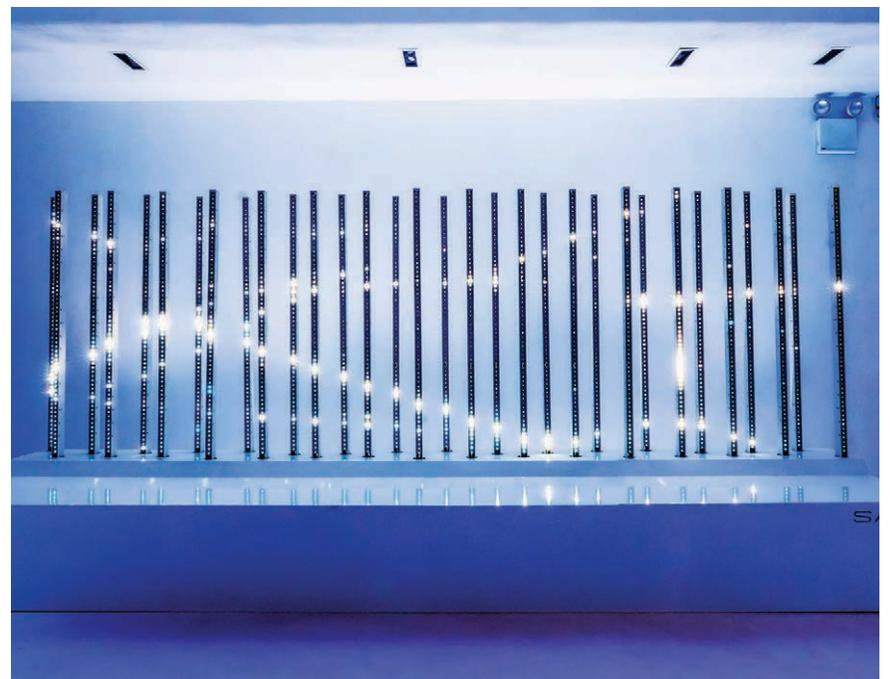
IN CONTROL

For any thoughtfully designed space, lighting is about more than just illuminating the room, it's an element that can powerfully affect the feeling and experience of a space. It's no wonder that the demand for customization and control is ever-growing, as designers seek to fine-tune the effect of lighting for both the long and short term.

"The two biggest trends I see right now are colour and control," says Ben Rajewski, electrical engineer for Williams Engineering. "With the use of LED technology, providing coloured lighting has become easier than ever and colour changing has become something many clients are looking for."

The Edmonton Valley Zoo is just one of Williams' clients embracing this trend. For its new children's area (Nature's Wild Backyard), Williams will be creating a dynamic lighting project that includes colour changing lighting for rope bridges connected to climbing towers, lighting for animal exhibits including red pandas, monkeys and lemurs, lighting for underground tunnels and caves for viewing burrowing animals, lighting for glass lily pad art, barn lighting and colour changing site lighting to highlight the trees and structures. "It is exciting to work on a project with so many unique lighting demands," says Rajewski.

From zoos to retail spaces to homes, coloured, controlled LED is becoming the standard. "Facades, under-bench lighting, interior coves – overall it is becoming more prevalent throughout," says Rajewski. The trend is to allow each individual space multi-level control of the lighting, which is easily done with LEDs and dimmers that allow users to control the space to their individual needs. "By having this control already in a space, controlling fixtures for dynamic colour changing has become easier to implement," Rajewski notes.



Shockwave Architectural lighting from SACO Technologies Inc.

This increased control didn't just come from consumer demand, however, it's tied to the requirements from both the National Energy Code for Buildings (NECB) and LEED for high-user controllability. But obligation or no, it's ultimately a good thing for everyone. Building owners are looking for energy-efficient, low-maintenance, long-lasting lighting, and LEDs fit that bill perfectly. "I see the new standard for controllability to be a great addition to a building, allowing for both energy efficiency and high usability," says Rajewski. "Spaces that don't require dynamic control are becoming more energy efficient by adding occupancy sensing into them to turn lights off when not in use."

"Lighting trends this year are really about the quality of light and longevity of both products and user experience," says Jonathan Labbee, COO and executive VP for SACO Technologies. "The control package is equally important to the light itself." With that in mind, SACO Technologies, a company dedicated to advancing solid-state LED technology in applications with lighting and media, is continuously evolving its Shockwave Architectural product line – with a particular focus on refining the programming toolset and quality of light to enhance user experience. "Our products are supported by our 'Switch' video lighting control application, which has a generative and interactive toolset to make creating a unique experience a breeze," says Labbee.

“Architects want to integrate customizable solutions that adapt to their creations,” explains Labbee. One key aspect of the growing popularity of controllable lighting is the shift away from DMX and Dali. “Architects and designers are seeking more video-based lighting that offers more colour resolution and smooth dimming curves.” SACO’s origins are in the development of LED Video screens, treating every LED element as a pixel and applying this technology to their video lighting line. “For us, there’s no difference between a high-resolution video screen and a light fixture. Both should be able to live in the same space, operate in the same space and contribute to the overall user experience.”

HEALTH FOCUSED

Rajewski sees the potential of commercial, public, and health-care spaces moving towards a human centric lighting approach, with tunable white LEDs that match the colour temperature of the space with the time of day and natural lighting.

“By using tunable white LEDs we can help keep an individual’s circadian rhythms in sync,” he suggests. “Early in the morning the lighting will be set for a more blue colour to match the rising sun, helping to wake up the occupant. Steadily, as the day progresses, the lighting will get warmer and leave out the blue light to let the melatonin production naturally occur. This allows individuals to hopefully organically wind down from their day at the office and go to sleep more easily.”

FINISHING TOUCH

For smart LEDs and incandescent bulbs alike, a great fixture is that finishing touch that can incorporate lighting seamlessly into the design or make it the star attraction. Over the few years, single-colour or single-metal has been the finish of choice for lighting fixtures, but the pendulum is swinging away from one uniform hue for 2019. At the Dallas International Lighting Market in June, multiple finishes was a prominent trend, notes Ormshaw. “Black is now being paired with brass or nickel.”

We’re also seeing home light fixtures mirroring a trend that’s happening for other home decor elements. “Lots of fixtures are now being offered in black to match bathroom faucets finishes,” says Ormshaw. “And gold, brass, bronze finishes are becoming a greater factor.”



Pendants finished in black and nickel available from Robinson Lighting & Bath.

Acosta has also seen the rise in popularity of black fixtures in matte finishes, but to white-matte options as well – both simple looks that are in line with the embrace of modernist design. Ornate designs or traditional looks continue to decrease in popularity, as minimal designs that have a sleek and modern esthetic continue to be top sellers, often incorporating linear and trimless applications for a clean modernist look.

Whether it’s affecting our health and wellness, or just setting the perfect mood, whether it’s via a statement-making chandelier or an on-trend minimalist fixture, lighting is a powerful tool in any designer or architect’s arsenal. The more lighting options available, the better! “Architects are engaged in using lighting to create vibrant spaces and highlight the building in unique and interesting ways,” says Rajewski. “Lighting can be used to change the feeling of the space depending on the time of day or activity going on, and architects and lighting designers are delving into this whole heartedly.” **A**

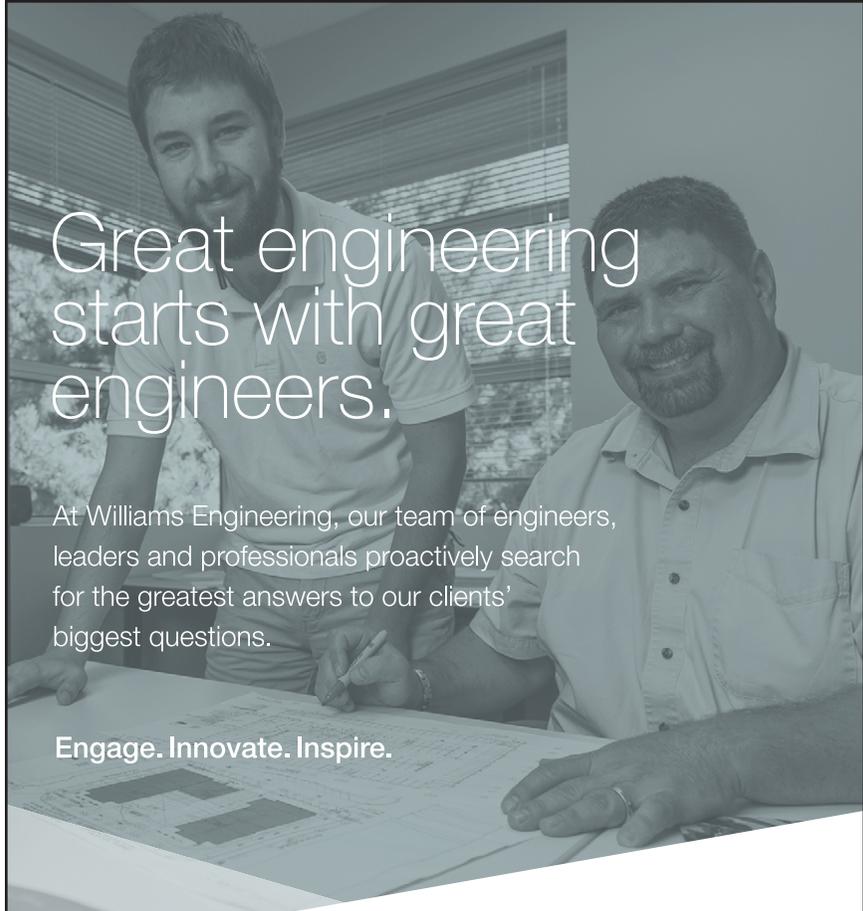


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