

light & **SHADE**

magazine
winter 2020 / v1

MADE IN TORONTO

 **legrand®**



COMMERCIAL SHADING SOLUTIONS
SEIZE THE DAYLIGHT

Daylight is the best kind of light — and daylighting control from Legrand lets you bask in the best of what each day brings. Introducing Commercial Shading, the perfect complement to Legrand's high performance dimming and customizable lighting controls. Don't chase the sun, let Legrand's Shading Solutions optimize your daylight blend — on into the sunset. [legrand.us/shades](https://www.legrand.us/shades)





Welcome to Light&Shade!

This magazine reflects our commitment to transforming the spaces where we live and work, and we couldn't be more excited to see it come to light.

Every quarter, we intend to help you and your customers control daylight and interact with shade. We will explore industry trends, provide an outlet for creativity, and advocate for sustainable building design.

Within this inaugural issue of Light&Shade, we're excited to feature the remarkably inspiring city of Toronto. Its horizon-wide spectrum of industry savvy provides a virtually unmatched backdrop against which we can present our ideas and products. We pay visits to CIBC Square which is revitalizing downtown Toronto and EY Tower at 100 Adelaide to marvel at the captivating slanted façade. Our shading product guru, Charlie Derk, reveals the benefits of light shelves and we share an intimate conversation with the renowned architects at Sweeny&Co.

On behalf of all of Legrand, a warm, well-lit welcome. We hope you enjoy our winter issue of Light&Shade. We look forward to working with you and showing how to develop unique, resource-aware solutions for bettering our interior spaces.

Together, we can #SeizetheDaylight and bask in the best kind of light.

Amy Hahne
VP & General Manager, Shading Systems

Amy.Hahne@legrand.us

LIGHT&SHADE MAGAZINE
is a publication of Legrand, Inc. and produced
by AD&M
© 2020

Art Directors: Adam Lenio, Howard Solomon
Principal Photography & Design: Adam Lenio
Words: Howard Solomon

AD&M is a creative content boutique delivering
Art, Design, & Media for print, digital and video
in a variety of tech-related industries.

Adam Lenio, Founder and Creative Director
Howard Solomon, Writer and Art Director
Ijlal Lenio, Graphic Design
Markis Lazarre, Graphic Design



CONTENT features

06 | PRODUCT INNOVATION

LIGHT SHELVES add a reflective component to any window to help daylight reach well into an interior space, and when automated with motorized shades they can create an ideal inner environment, all year round.

10 | O'TORONTO

For our inaugural issue, LIGHT&SHADE Magazine heads to Canada's urban powerhouse on Lake Ontario, where the latest in architectural daylighting design and innovation rises far and wide.

12 | WORK IN PROGRESS

Toronto city planners estimate that nearly 40 million square feet of office space will be needed by 2041 to keep pace with the current demand. CIBC Square is rising up to the task.

16 | CREATING GREAT URBAN SPACE

From their offices on the sixteenth floor of Queen Richmond Centre West, the Toronto-based architecture firm of Sweeny&Co builds opportunities to make cities fabulous.

21 | A NEW SLANT ON DAYLIGHTING

Toronto's EY Tower gets the royal window treatment from Legrand with a customized fit to optimize daylight for reduced interior solar heat gain and improved tenant comfort.

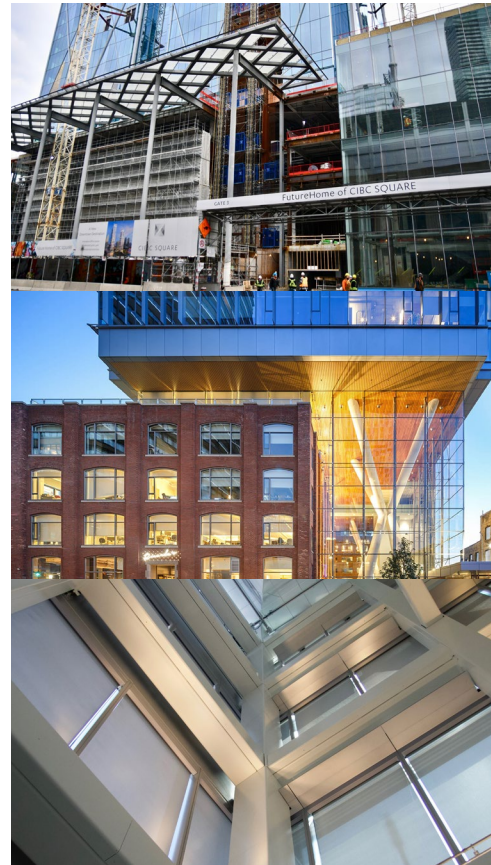
27 | FOCUS ON FABRIC

How to make sense of dark and light fabrics, and what they mean for your space.

28 | LEGRAND SPOTLIGHT

PINNACLE ARCHITECTURAL LIGHTING takes a design professional's perfect vision on paper and literally brings it to light.

30 | PARTING SHOT



PRODUCT INNOVATION

The Benefits of Shelf Reflection

For all the advantages automated shades offer to properly daylighting an interior space—and delivering on the promise of natural light for the comfort and well-being of its occupants—a few disadvantages come with the territory.

In fact, you might say territory is the very cause of these disadvantages, since direct sunlight entering through any window is limited to its reach inside.

Imagine early afternoon at the office. Outside, it's a bright, crisp winter day. Cold as H E and a pair of hockey sticks, but not a cloud in the blue sky. If you're lucky enough to have a desk by the window, you're enjoying that warm sunlight pouring in (remember, thanks to your automated shades, glare is not a problem). But what about your colleague sitting a few desks further into the interior of the floor? The only way direct sunlight is going to get from your desk to theirs is with a little help—a little bounce, courtesy of a light shelf.

Providing a reflective, horizontal plane just inside a window, a light shelf gives direct sunlight a surface from which to “bounce”

Providing a reflective, horizontal plane just inside a window, a light shelf gives direct sunlight a surface from which to “bounce” up to a ceiling

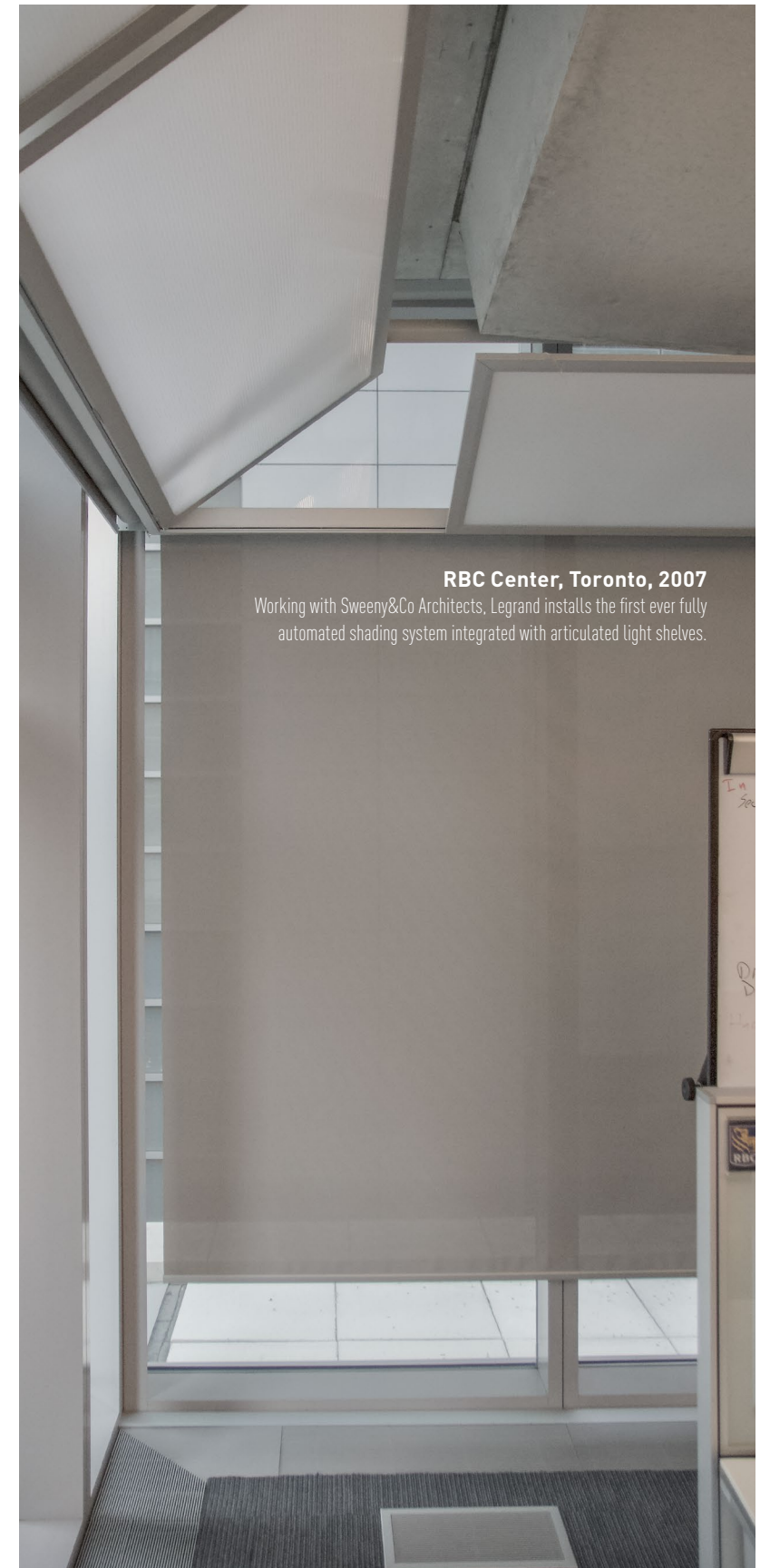
up to a ceiling to distribute natural light more evenly and deeper into an interior space. And while the composition of light shelves might vary based on architectural design, they are generally comprised of extruded aluminum or aluminum composite material for their conductive and lightweight properties, with a matte finish on the top to better diffuse direct sunlight while minimizing glare and maximizing interior penetration.

Light shelves are particularly advantageous when used in regions in the Northern Hemisphere, so it's no surprise that a city like Toronto would see a number of them in use in its most recent office-space developments. Legrand is a chief installer of light shelf technology in the Greater Toronto Area. Collaborating on project development with Sweeny&Co Architects since the construction of Microsoft's Canada Head office in the Toronto suburb of Mississauga in 2002, Legrand has been at the forefront of improving the design and implementation of light shelves.

John Gillanders, a Sweeny&Co Principal oversaw the development of light shelf design with Legrand's Solarfective shades. “Light shelves have been used in buildings for quite some time,” Gillanders said in a recent interview. “Typically, light shelves reflect sunlight from their top surface up onto the ceiling of the office to create an indirect, more or less glare-free lighting from natural sunlight. But working with Legrand, we

RBC Center, Toronto, 2007

Working with Sweeny&Co Architects, Legrand installs the first ever fully automated shading system integrated with articulated light shelves.

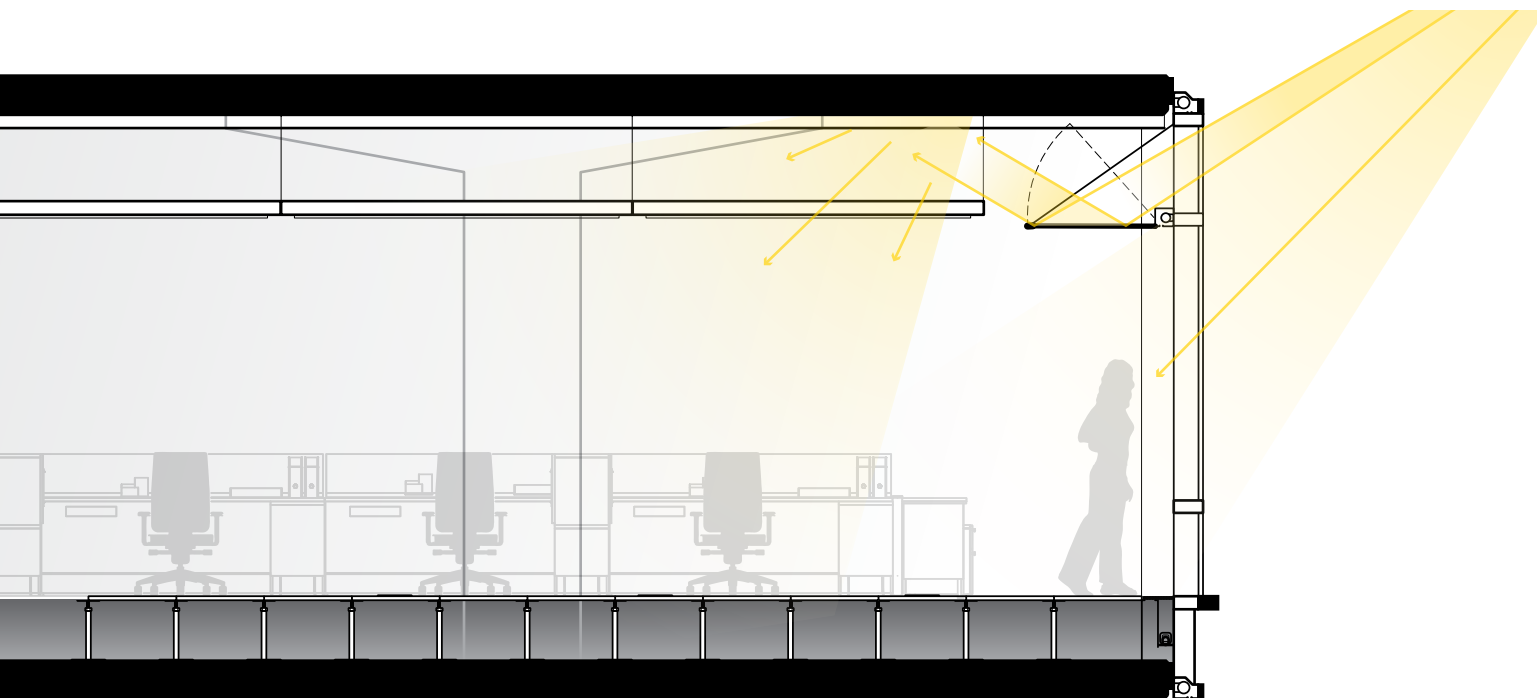


realized that the position of the interior light shelf, especially in winter months when the sun is low in the sky, had a tendency to allow daylight to stream over the top. Depending on the orientation of the building, at sunset direct sunlight would not be reflected at all, but stream straight in to the workspace. Which defeats the purpose of the light shelf."

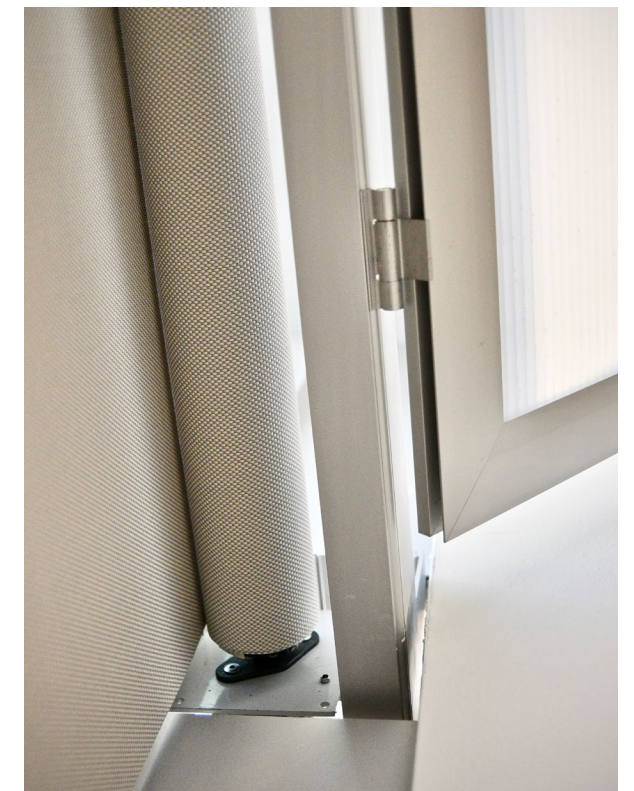
"...the light shelves themselves turn into shades..."

The solution Gillanders developed with Legrand was a motorized light shelf, one that could be integrated into an overall automated shading system. "The idea of creating motorized light shelves that are articulated and tilt up when necessary to block direct sunlight is something that we pioneered," says Gillanders. "We've installed them in a number of different buildings. It solves the problem of having glare that is very uncomfortable at certain times of the year. And in fact, the light shelves themselves turn into shades in a sense. I think it's been really quite a successful approach." ☞

LIGHT SHELVES WORK TO EXTEND THE SUN'S REACH TO HELP INTERIORS MAKE THE MOST OF THEIR INNER LIGHT



At Mississauga's 5015 Spectrum Way, rooftop sensors follow the angle and position of the sun—day by day, season by season—and direct an integrated system of Legrand lightshelves and shades to adjust for optimal interior daylighting.



MADE IN TORONTO

Twenty years in, it's the building boom that keeps on booming. The extent of new construction currently underway in downtown Toronto, not to mention across the Greater Toronto Area, is on pace to put Ontario's provincial capital in the top tier of world-class cities. And while the city's financial services sector continues driving new development of office and mixed-use buildings, the increasing presence of global big tech along with the growth of cultural and educational institutions has created a demand for new development unmatched in Canada, if not the whole of North America. Light&Shade Magazine pays a visit to see the boom from the ground floor up, with an eye on the latest in architectural design and building technologies—and the innovations in interior daylighting that's help making Toronto a fabulously livable city, indoors and out.



WORK IN PROGRESS

cibc square is at the core of toronto's downtown construction

Toronto city planners estimate that nearly 40 million square feet of office space will be needed by 2041 to keep pace with the current demand. Even with construction still underway, the first tower of CIBC Square was already fully leased over two years ahead of expectations.



MAKING THE ROUNDS AT CIBC SQUARE

When fully completed, CIBC Square will represent nearly three million square feet of commercial space added to Toronto's South Core neighborhood, with a state-of-the-art office campus featuring two towers of 49 and 50 stories connected by a one-acre elevated park spanning the rail corridor to Union Station, and home to such business names as Microsoft, AGF, and of course, the Canadian Imperial Bank of Commerce.

The first tower at 81 Bay Street, slated to open in mid-2020, already shows off much of its architectural splendor, with its striking gem-cut-like façade shimmering on the skyline, and its floor-to-ceiling windows of acoustically optimized glass giving a hint at the panoramic views of Lake Ontario in store for its future tenants.

S05 Smoke



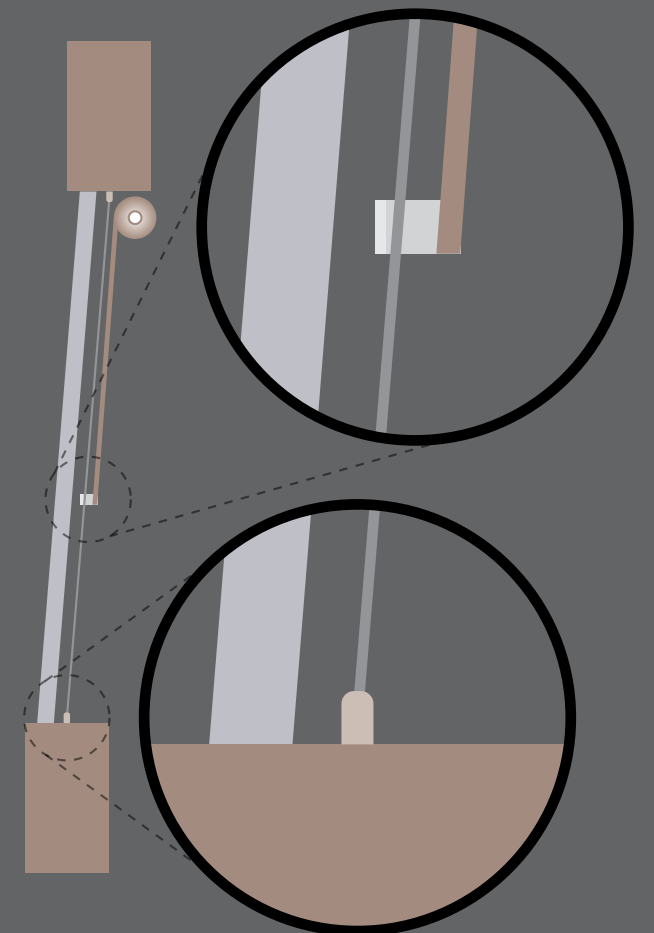
As part of Legrand's fabric offering, the SheerWeave 8000 from Phifer fabrics is a cradle-to-cradle unique basketweave construction of 100% recyclable polyester yarn that is not only eco-friendly, but also provides excellent fabric stability and enhanced outward views. Over 7500 linear yards of it in its S05 Smoke option will hang in 81 Bay Street's windows.



A central focus of the entire CIBC Square development is the well-being of its eventual users. That includes not only its tenants, but also the daily visitors expected to frequent its soaring public spaces. And with attention on being an environmentally responsible member of its surrounding community, the entire complex is engineered to LEED® Platinum and WELL Building Standards™ specifications to meet the highest energy-efficiency and sustainability in every detail.

One simple example of that attention is the window shading selected for use in the 81 Bay Street Tower. **Made of 100% recyclable polyester fabric, the 7,100 shades installed by Legrand will be hung at a customized angle to fit the tower's uniquely slanted windows,** helping to achieve the promise of optimum occupant comfort and energy-efficiency in the interior office spaces. ☞

Legrand shading installed at 81 Bay Street feature customized assembly to fit the 87 degree slant of the windows.





CREATING GREAT URBAN SPACE

the Toronto-based architecture firm of Sweeny&Co builds opportunities to make cities fabulous

Queen Richmond Centre West incorporates over 300,000 square feet of high-performance office space supported on a trio of 80-foot Delta Frames, each one rising above the pre-existing brick and beam buildings like a giant toy jack—and bearing 210,000 kilonewtons in the process. (That's over 20 million kilograms of load under Earth gravity for anyone who's keeping count.)



To understand the basic design philosophy—and passion—of Sweeny&Co Architects, you only have to step outside their offices on 134 Peter Street and look up.

And yeah, your jaw will drop.

Queen Richmond Centre West at the intersection of Peter Street and Richmond Street West has been called “gravity-defying”, an 11-story office building of contemporary glass and steel “floating” 80 feet from the ground over a pair of six-story brick-and-beam factories from the nineteenth century. Or what Sweeny&Co Founding Principal Dermot Sweeny would call “an opportunity.”

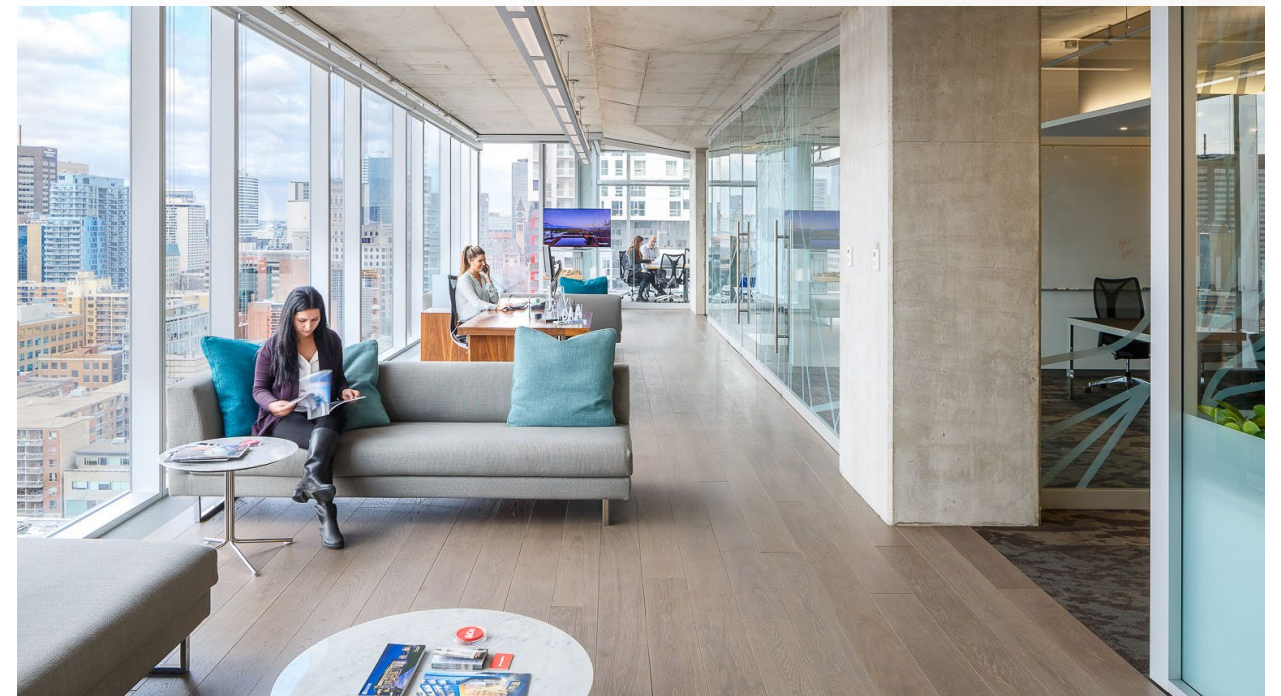


“Building over buildings gives us a tremendous new opportunity to intensify our cities”

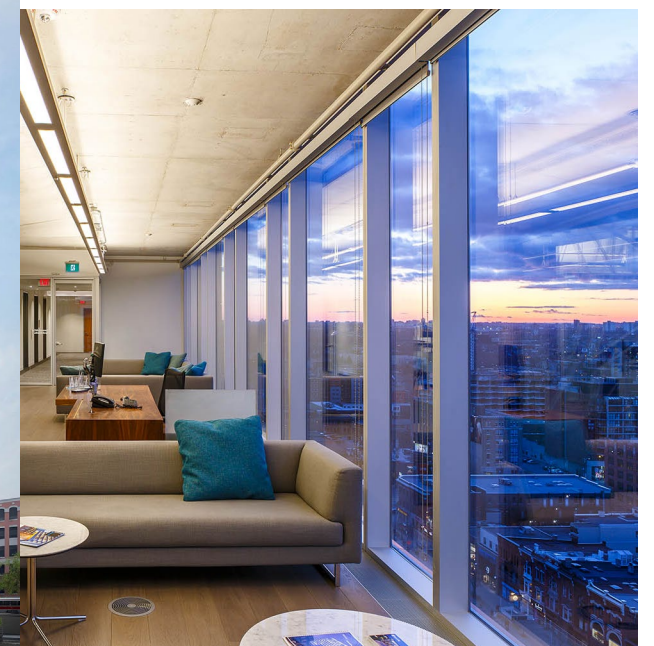
“Building over buildings gives us a tremendous new opportunity to intensify our cities,” Sweeny said in a recent interview, “As cities get denser, building above existing buildings is a great way to unlock tremendous density and I think many of our cities typically have in the past just demolished heritage buildings to make way for new buildings.” Sweeny sees things a little differently. “We’re always looking for the things that are beautiful and work well in the city.”

The award-winning Queen Richmond Centre West is in fact both beautiful and working

With uninterrupted north and east views of the city, the 16th floor of 134 Peter Street is a model open office environment and home to Sweeny&Co’s team of over 35 members. “It’s a privilege for most architects to work in a building they themselves designed,” says Founding Principal Dermot Sweeny. “When the chance came to move our office to Queen Richmond Centre West, it was an opportunity we couldn’t pass up.”



25 Ontario is Sweeny&Co’s latest development. Known as The Shift, it’s a 22-story, 41,500 square meter LEED Gold office building that boasts multiple outdoor terrace space and 10 vision glass among its many features.



well, in a city that continues to see its fair share of new construction. Add to it Sweeny&Co's many other building achievements in Toronto—and the others in development still to come—and anyone that appreciates architecture that improves how we work and live in a healthy, comfortable, and sustainable urban environment will understand why this multidisciplinary architecture, design and real estate firm has become a Canadian powerhouse.

A WORKING PARTNER WITH LEGRAND

Ask John Gillanders his philosophy of office building and you might be surprised how simple his answer is. "Generally speaking," he says, "what we're really trying to accomplish is to make spaces that are more comfortable." In a recent interview, the Principal Planner at Sweeny&Co shared some of his thoughts on architectural design and related his ongoing collaboration with Legrand in developing a motorized interior light shelf for optimizing the benefits of natural light indoors.



With a broad professional experience that also comprises architecture, interior design, furniture and fixture design, Gillanders has provided expertise for commercial, industrial, residential, retail and hospitality environments for over 30 years, leading and managing the projects of Sweeny&Co's most renowned award-winning buildings, including Queen Richmond Centre West and the RBC Centre for the Royal Bank of Canada in Toronto. Gillanders is particularly proud of the new ground Sweeny&Co has broken over the years in terms of energy-efficiency and sustainability. "We continue to build on these accomplishments of course," he says, "but at the heart of it, it's really

about trying to make spaces that are more comfortable for people to work in." Which brings him to the importance of natural light within the workspace.

"At Sweeny&Co, we've worked to find ways to improve the amount of natural light within a workspace, while at the same time making sure that we minimize the negative impact of natural light, such as glare or temperature discomfort. And that's where our long term collaboration with Legrand comes into play." ☞

The head office of Loblaw Companies Limited in Brampton, ON, was one of the first projects to bring Sweeny&Co together with Legrand.

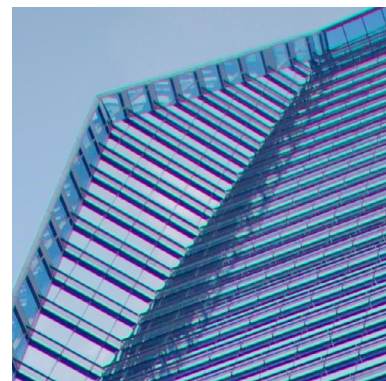
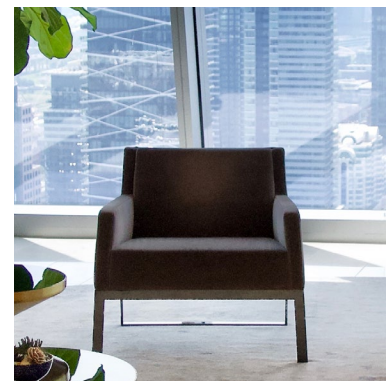
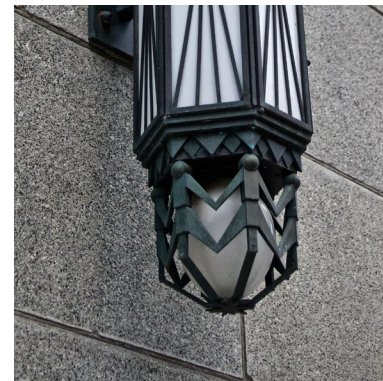
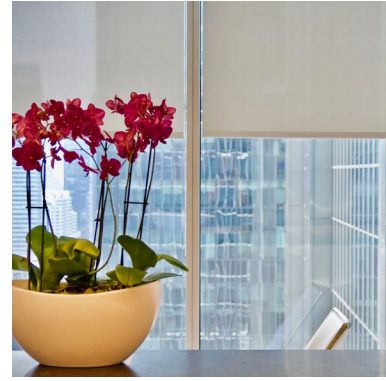
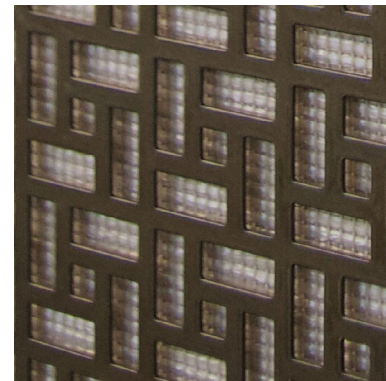
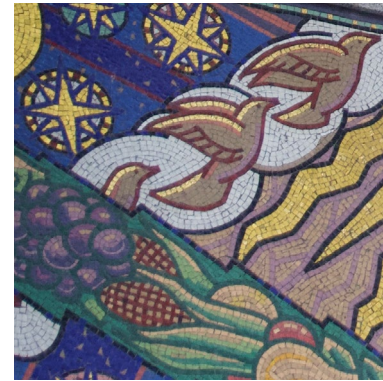


A NEW SLANT ON DAYLIGHTING

historic detail and innovative design take a meeting at 100 adelaide street

With eastern, western, and southern exposure, the unique slanted glass façade of an architectural marvel in downtown Toronto needed custom-sized shading to optimize daylight to help reduce interior solar heat gain and improve tenant comfort. Legrand Commercial Shading offered the perfect fit.





THE VIEW FROM THE 40TH FLOOR IS BIG, BRIGHT, AND BREATHTAKING.

But then again, Toronto's EY Tower is all about taking your breath away, with a 20th century splendor remade into 21st century spectacular. Completed in 2017 as part of the Richmond-Adelaide Centre of the downtown Financial District, the EY Tower at 100 Adelaide Street West stands nearly 620 feet and encompasses a total area of over 900,000 square feet. It also has bragging rights as Toronto's first AAA office building with LEED Platinum certification. Aesthetically, the structure is most notable for its dynamic, slanted glass expanse rising 40 stories above the reconstructed façade of the historic Concourse Building, the site's previous long-time resident.

For eighty-five years, the Concourse Building was an iconic, art-deco marvel in the heart of the city, famous for the

decorated Romanesque arch that graced its entrance and the vivid depictions of machine and nature found in its mosaics by celebrated Group of Seven artist J.E.H. MacDonald. With the Toronto Industrial Commission as its tenant, the building became a center to promote the city as a leader of finance and business in Ontario. Over the years, the Concourse Building fell into disrepair, but when the site was purchased in 1998 to make a way for a modern office tower, the decision was finally made to save much of the building's former glory even in the face of new construction. The Concourse Building was demolished in 2013, but not before the exquisite art-deco detail—from cornices to crafted stone—was saved and stored away, to be used in the reconstruction and integrated with the new architectural design.

A Welcoming Workspace

That new design includes exceptional modern workplaces with an emphasis on sustainability, technology, and the occupant experience. Much of the building features nine-foot floor to ceiling windows with clear low-E glazing, which improves solar and thermal performance, maximizing daylight and keeping the building temperature comfortable and consistent.

Adding a shading system to enhance daylighting benefits presented a challenge for the EY Tower's slanted windows like those on the 40th floor. Angled at twelve degrees from ninety, those windows required the customized system that Legrand was able to provide, with a mechanism fitted with the slant of each window, for a result that was both practically effective and aesthetically pleasing. And for the upper windows of the 40th floor's dramatic, multi-story amenity space, a sun-tracking system was included along with keypads for local control, giving occupants full control to make the most of the automated system, as well as Legrand shades patented manual override. ☐

Afternoon sunlight on the 40th floor creates a lobby that is both welcoming and comfortable for visitors.





Photo courtesy of SOLARFECTIVE, Canada.

FOCUS ON FABRIC

When to choose light or dark colors



Light or Dark Colors? Both have their benefits:

LIGHT COLORS

- provide high levels of visible light transmission
- reflect high percentage of light to help keep out heat
- preserve levels of natural light, reducing need for artificial lighting

DARK COLORS

- reduce visible light transmission (glare)
- improve transparency during daylight hours increasing exterior visibility
- “meld with the glass” becoming “invisible” from the interior and exterior



Quality. Service. American Made.
Specify SheerWeave, the world's most trusted brand
of solar screen fabrics.



LEGRAND SPOTLIGHT

at the pinnacle of architectural lighting

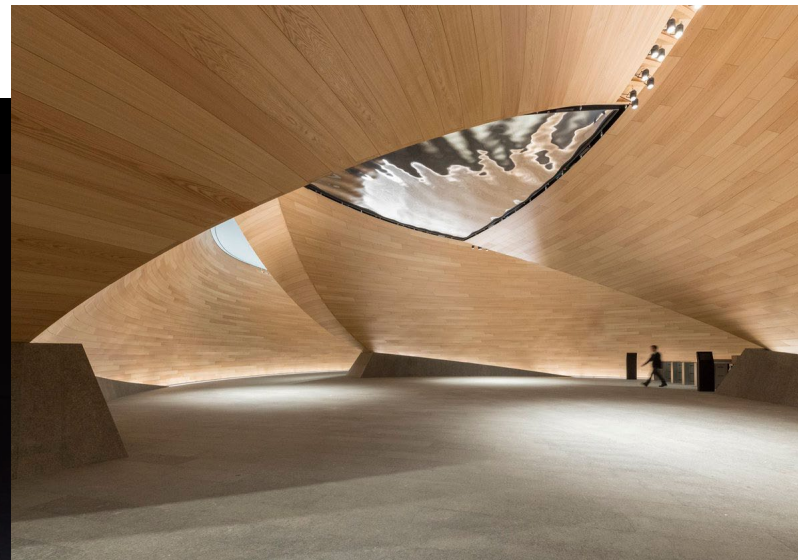


Pinnacle Architectural Lighting takes a design professional's perfect vision on paper and literally brings it to light. Their manufactured creations include every shape and form of light fixture an architect could dream up, from modern hanging pendants to asymmetrical wall installations. And while their latest offerings in indoor lighting are a sight to see—and see by—they also offer BIOS SkyBlue™ LED technology that infuses natural blue sky spectrum into LED light, to illuminate an indoor environment with a lighting that offers the circadian benefits of the sun.

Learn more about Pinnacle at www.pinnacle-ltg.com

ANGULAR DEFINITION

Pinnacle's **Oivi** makes a statement in any architectural space. The versatility of this geometric fixture allows for unique applications that are further amplified with any other fixture in the Pinnacle Architectural Lighting catalog.



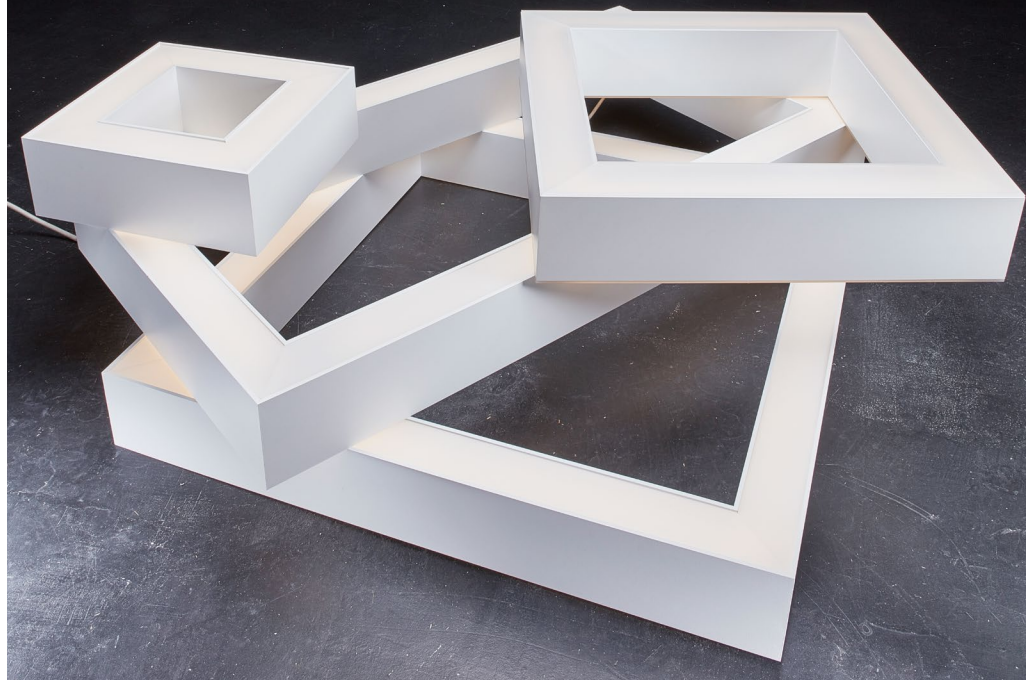
DESIGNED FOR PRECISION

Linero combines slim housing profiles with functional distribution options. The slender architectural form ensures consistent, even radiance on every surface.



INDIRECTLY ILLUMINATE

Call it Pinnacle's updated and perfected answer to indirect lighting, **Cove** allows for a soft, practical LED light to project in to the space without any glare from the hidden source.



PARTING SHOT

Contact one of our shade professionals to help put your design in its best light. Otherwise there may be unintended consequences...

Shades Not Part of Building Design



Shades Part of Building Design



COMMERCIAL SHADING SOLUTIONS

SEIZE THE DAYLIGHT

Daylight is the best kind of light — and daylighting control from Legrand lets you bask in the best of what each day brings. Introducing Commercial Shading, the perfect complement to Legrand's high performance dimming and customizable lighting controls. Don't chase the sun, let Legrand's Shading Solutions optimize your daylight blend — on into the sunset. [legrand.us/shades](https://www.legrand.us/shades)

 **legrand**[®]



COMMERCIAL SHADING SOLUTIONS

SEIZE THE DAYLIGHT

Daylight is the best kind of light — and daylighting control from Legrand lets you bask in the best of what each day brings. Introducing Commercial Shading, the perfect complement to Legrand's high performance dimming and customizable lighting controls. Don't chase the sun, let Legrand's Shading Solutions optimize your daylight blend — on into the sunset. [legrand.us/shades](https://www.legrand.us/shades)

