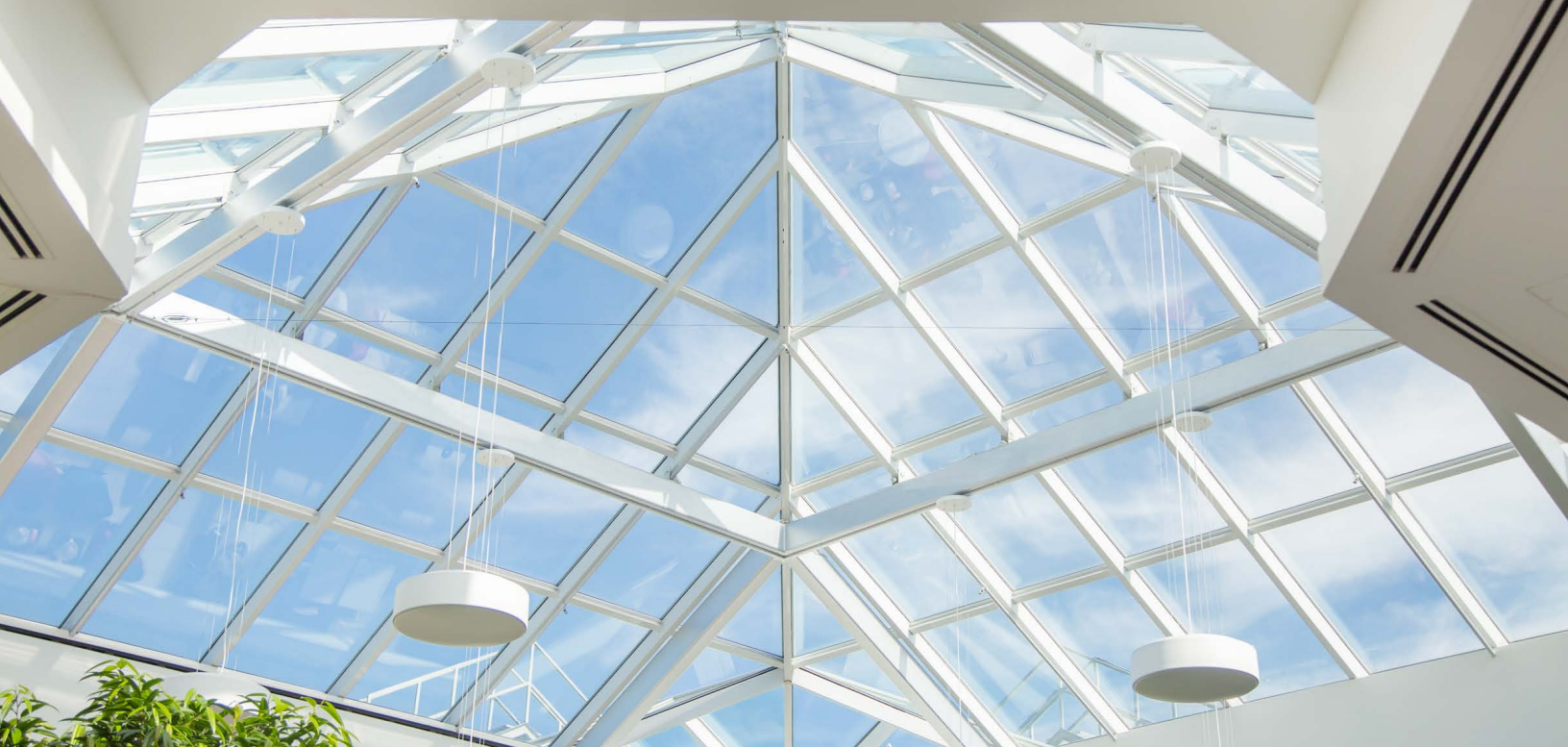




Privacy & Shading - Taking the Pulse of the Industry

White Paper



INTRODUCTION

The building industry is now - more than ever before - fast moving, technology savvy, and always changing. As is virtually everything else in the 21st century, it's also becoming more and more influenced by several big-picture trends from green and sustainable building, to increased natural daylight, to inclusive architecture and universal design.

These trends have a constant influence on projects of all stripes and sizes and are often a major consideration when building professionals interact with clients or plan their projects.

With this in mind, Unicel Architectural – a company that for over 55 years has built a reputation for the most advanced privacy and shading solutions on the market – wanted to gauge the opinions of industry professionals and influencers on the latest trends as they see them, along with gathering valuable feedback on Unicel's own Vision Control® insulating glass with integrated louvers product.

WHO PARTICIPATED?

Unicel surveyed hundreds of architects, glaziers, engineers, designers and others in the building industry for their impressions of both major industry trends and Unicel products. Of respondents nearly 40 percent were architects, 30 percent were glaziers, 10 percent were designers, and three percent were engineers (with the rest falling under "other").

Slightly more than 60 percent indicated they are responsible for specifying building products. Respondents also indicated they are mostly involved in commercial projects, followed by health care, institutional, and educational, with a small number also involved in residential projects.

SURVEY HIGHLIGHTS

Respondents were presented with multiple questions ranging from general industry trends to more specific, Vision Control®-related queries. Some of the survey highlights regarding industry trends include:

- **84%** of respondents among all groups indicated energy efficiency is the most important current architectural trend
- **68%** indicated that energy efficiency is the No. 1 architecture trend among their clients
- **56%** of those responsible for specifying building products indicated natural daylight was one of architecture's most important trends, compared to 38% of other respondents
- **Nearly 40%** of respondents cited improved noise control as a top trend for architecture and design today.



Some survey highlights regarding Unice's Vision Control® integrated louvers product included:

- **59%** of those who have specified Unice's Vision Control® products indicated that improved safety and security is a top trend among their clients
- **65%** of respondents indicated that privacy control is Vision Control®'s greatest strength, followed by quality of product (37%)
- **95%** of glaziers were familiar with Unice's Vision Control® product
- **96%** of respondents rated their Vision Control® experience as either excellent (55%) or very good (41%)

Overall, respondents indicated that green building trends like energy efficiency and sustainability are some of the most important current directions in architecture – both for them and their clients – along with improved safety and security, noise control, and natural daylight. Respondents also noted an overall deep satisfaction with Vision Control® products, along with a noteworthy amount of industry familiarity across all occupations (along with the glazier figure above, 73% of engineers/designers and 53% of architects were familiar with the product).

We will take a deeper dive into some of the most intriguing questions in the following section.

SURVEY RESULTS – INDUSTRY TRENDS

Q4: What do you feel are the five most important general trends in architecture and design today?*

83.8%

Energy efficiency

62.9%

Improved safety
and security

50.7%

Sustainability

49.3%

Natural daylight

34.1%

Improved
noise control



While respondents indicated that green building elements like energy efficiency and sustainability are top of mind, it is clear that other considerations such as improved safety and security, improved noise control, and natural daylight are also very important to those in the building industry. Interestingly, among respondents responsible for specifying building products, more than half (56%) indicated that natural daylight was a top trend compared to just 38 percent of other respondents.

With ongoing security concerns at public buildings like schools, hospitals and government offices, it is only natural that safety and security also be high on the priority list. Indeed, the Whole Building Design Guide (produced by the National Institute of Building Sciences) devotes an entire section to security and safety, including four fundamental principles of “all-hazard building design”:

- **Plan for fire protection:** a systems approach that analyzes all building components as one
- **Protect occupant safety and health:** takes into account indoor air quality, electrical safety, ergonomics and accident prevention
- **Natural hazards mitigation:** anticipates and mitigates the risk of major natural hazards
- **Provide security for building occupants and assets:** implements countermeasures to deter, detect, delay and respond to attacks from human aggressors

* Out of 17 possible choices

It is also worthwhile to quickly look at trends that received the least amount of importance in the survey:

17.9%

Use of local materials

16.2%

Inclusive architecture

7.4%

WELL certification

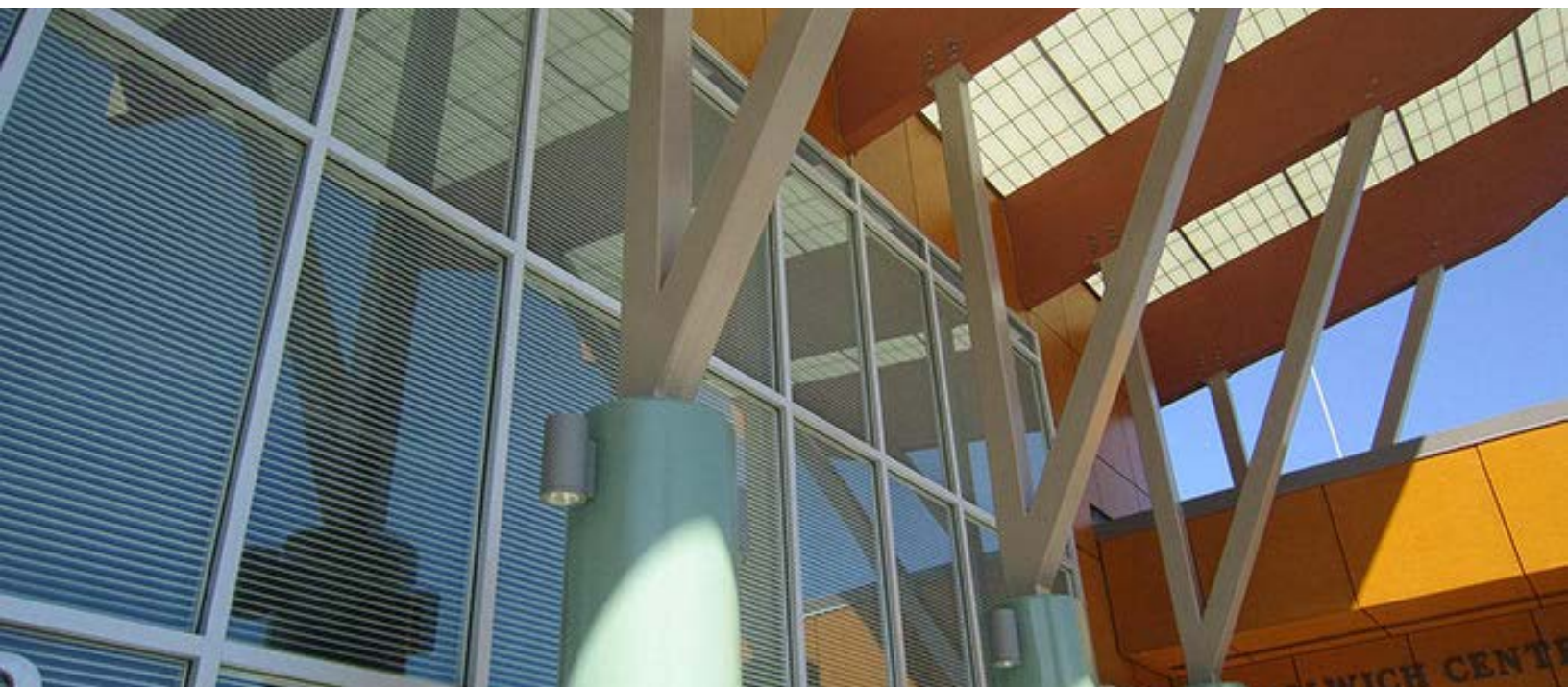
5.7%

3D printing

3.5%

Small-scale homes

It seems that, although trends like small-scale homes and 3D printed buildings have made plenty of noise in the news and on social media of late, they are perhaps a ways away from being part of the mainstream building industry conversation.



Q5: What, on average, are the three most popular architecture and design trends for your clients?

68.1%

Energy efficiency

44.5%

Improved safety and security

31.4%

Sustainability

30.6%

Improved noise control

30.1%

Natural daylight

Trends that made up the top five in this question were practically identical to those in Q4 (with the exception that improved noise control and natural daylight switched ordering). This indicates that, by and large, the top trends cited by industry professionals are virtually the same as what the market is asking for.

Safety and security were especially highlighted among Vision Control® customers: of respondents who said they have specified Vision Control® for a project, 59 percent indicated improved safety and security were a top trend compared to just 39 percent who have not specified Vision Control®.



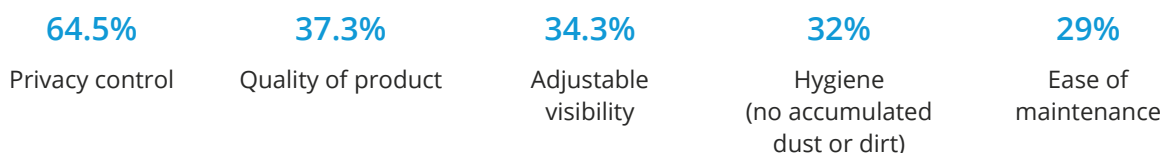
UNICEL'S VISION CONTROL®: THE MARKET'S VIEW

This section will cover respondents' views on Unicel's Vision Control® integrated louvers product. Vision Control is a patented, hermetically sealed insulating glass unit that combines louvers within glass and is customizable to virtually any shape for interior or exterior glazing applications.

Respondents had a good level of awareness of Vision Control® with 95 percent of glaziers, 73 percent of engineers/designers/other professions, and 58 percent of architects indicating some level of familiarity. Those responsible for specifying building products were less likely (69%) to have heard of Vision Control® than those who are not (81%). And of those who specify building products, more than two-thirds (69%) indicated visual/privacy control was the No. 1 reason for specifying the product. Meanwhile, those who had not ever specified Vision Control® indicated that budget/cost issues were the main reason (56% of architects, and 37% of overall respondents).

An overwhelming 96 percent of respondents rated their Vision Control® experiences as being either excellent (55%) or very good (41%).

Q7: What would you consider Vision Control®'s top three greatest strengths/features?



Of Vision Control®'s greatest strengths, the majority of respondents centered around the concepts of enhanced privacy along with ease of use/lack of required maintenance. Factors such as aesthetics (14.2%), sound control (11.2%), manufacturer reputation (10.1%), and temperature control (4.1%) were deemed less important by respondents.

Q12: For which reasons did you specify Vision Control®?

69.2%

Visual/privacy
control

51.3%

Manufacturer
reputation

48.7%

Cord-free

46.2%

Reliability

42.3%

Ease of use

The top reasons for specifying Vision Control® were similar to the product's greatest strengths (Q7), with visual/privacy control the clear top reason for specification. Of factors not prominently selected by respondents, warranty (15.4%), budget/costs (6.4%), and acoustic performance (6.4%) were the least popular.



CONCLUSION

The survey's results clearly show that sustainable, environmentally-friendly, and green building trends are at the top of virtually every building professional's list be they glaziers, architects, engineers or other specialists. Close follow-ups include increased safety and security, improved natural daylighting, and better noise control.

These are all attributes closely associated with Unicel's Vision Control®, which has been proven to contribute to LEED certification by reducing energy use, controlling solar heat gain, enhancing natural daylighting, and providing better acoustic performance. In addition, Vision Control® recently completed environmental and health audit for Health Product Declaration® and mindful MATERIALS Library listing.

ABOUT UNICEL ARCHITECTURAL

Glass, skylights and curtainwalls are essential elements of architecture that support the soaring vision of the architect and shape a welcoming and effective experience for the people inside and out. For more than 55 years, Unicel Architectural's custom-built, specialty-engineered glazing, skylights, and curtainwalls have been helping architects mold light and shade to create singular environments for both pleasure and purpose.

Through glass, aluminum and wood, Unicel Architectural helps architects impact lives by defining the space within.

Our specialty and louvered glazing solutions offer true environmental control over vision, heat, daylight and sound. We create custom-built structures that allow any building to be operated more safely and efficiently without sacrificing aesthetics. Vision Control®, our patented, hermetically sealed glass unit with integrated louvers product, is the perfect application for any interior or exterior application.

Our large, customized skylight projects are sophisticated framing systems utilizing the most advanced water-infiltration and condensation-guttering system. With pressure-equalized rain screen technology and notched-rafter construction, our system stays sealed in all climate conditions.

Our custom structures, like solariums and curtainwalls, come with complete design and installation support, enabling your exterior envelope to be turnkey. Our timber curtainwalls increase the thermal effectiveness of glazed facades and building skins. Net-zero building has never looked so good!

Our projects span the globe. Each and every environment we help create is unique and custom-built to combine form and function into spaces that positively affect the people living within them. As architects, you strive for the exceptional. As design engineers, we do as well, with our technologically advanced products that bring the architect's vision to light. Unicel Architectural is a Canadian-owned company committed to the process of sustainable building. The company's headquarters and production facilities are located in Longueuil, Quebec, Canada.

To learn more about the company or to schedule a call, please visit our website at <http://www.unicelarchitectural.com>, email unicel@unicelarchitectural.com or call +1-450-670-6844 or 1-800-668-1580.

Unicel Architectural
Defining the Space Within

