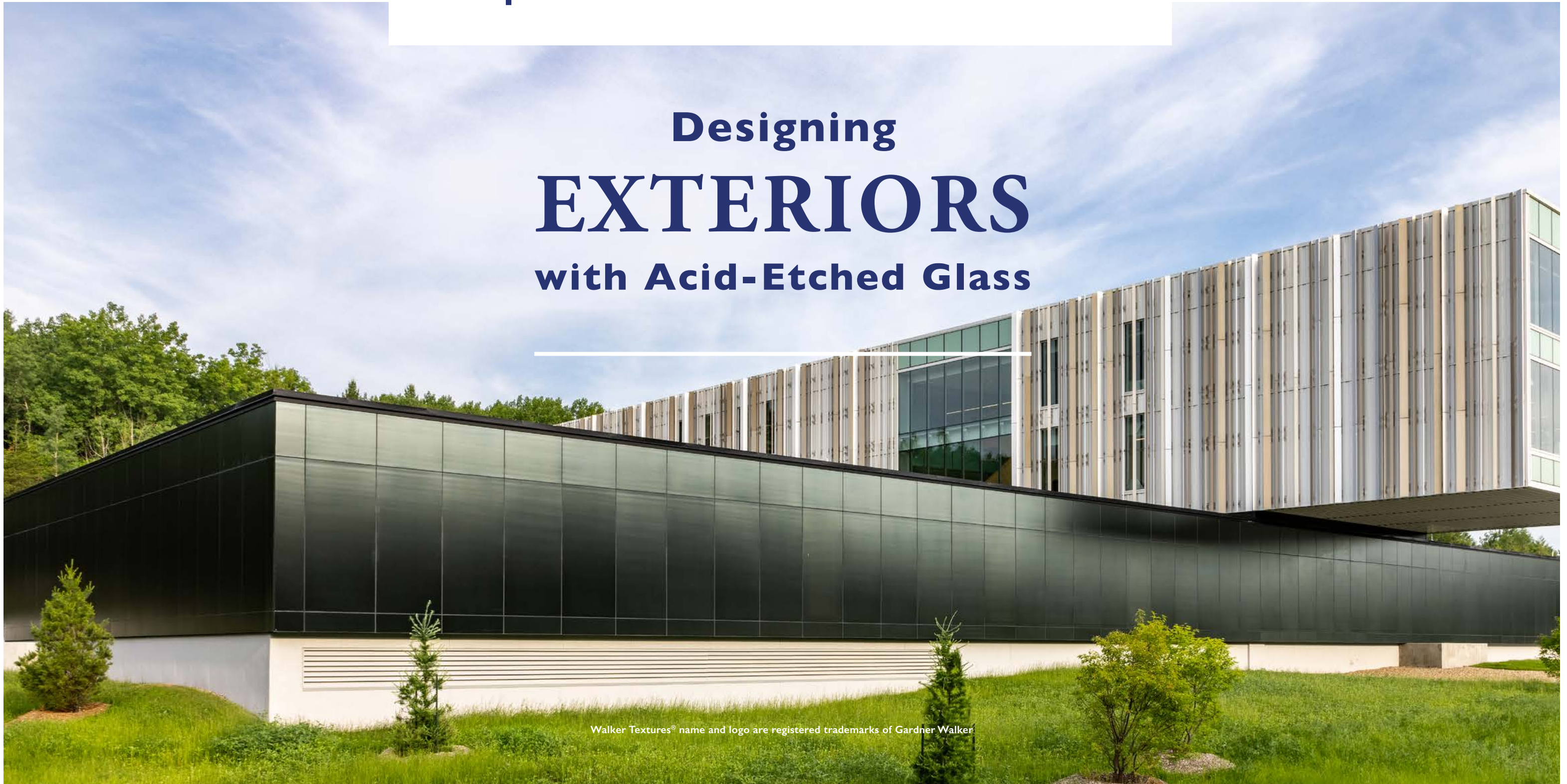




Designing **EXTERIORS** with Acid-Etched Glass



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Preface

to the e-guide of designing exteriors with acid-etched glass

Acid-etched glass entered the market through interior design, but it wasn't long before it made the jump to exterior applications. Since then, etched glass products like Walker Textures® have changed the face of glass architecture. These days you'll see them on towering curtain walls, sweeping façades, and a plethora of other design elements.

There are many, many ways to elevate a project with acid-etched glass, and we won't try to cover them all here. Instead, we hope to inspire you to dream of etched-glass architecture, and help you make informed choices so you can make the most of your materials. Bring your visions to life!



Within these pages, you'll find insights into the benefits of acid-etched glazing and strategies to achieve the most with your glass. You'll see how the unique characteristics of each glass type affect a project's daylighting potential, energy performance, aesthetics, durability, and environmental footprint. You'll find a catalogue of available options, an overview of our support for building professionals, and much more.

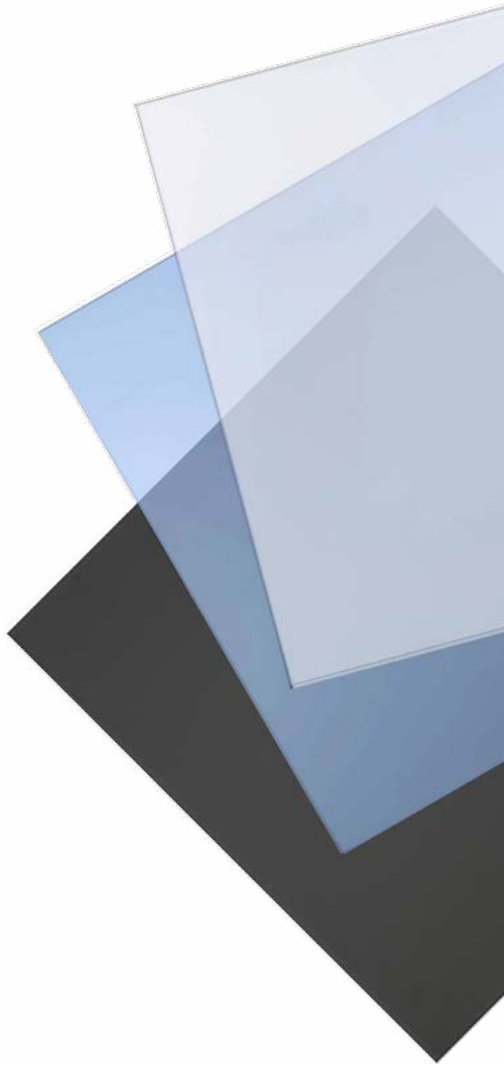
Seeing is believing, so we've included plenty of examples of acid-etched glass architecture. Landmark institutions, innovative educational spaces, world-class infrastructure, and commercial behemoths - all built with Walker Textures® acid-etched glass.

There's a lot to know about etched glass. We hope you'll let this book be your guide.



A handwritten signature in blue ink, appearing to read 'CA'.

Charles Alexander
Vice-President of Sales and Marketing
Gardner Walker



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Benefits of acid-etched glass:
Privacy and security




STARPHIRE

Many projects illustrated in this eGuide show the uniquely pure characteristics of **Starphire Ultra-Clear®** glass from our partner **Vitro Architectural Glass**.

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Feature project: University of Pennsylvania
Krishna P. Singh Center for Nanotechnology

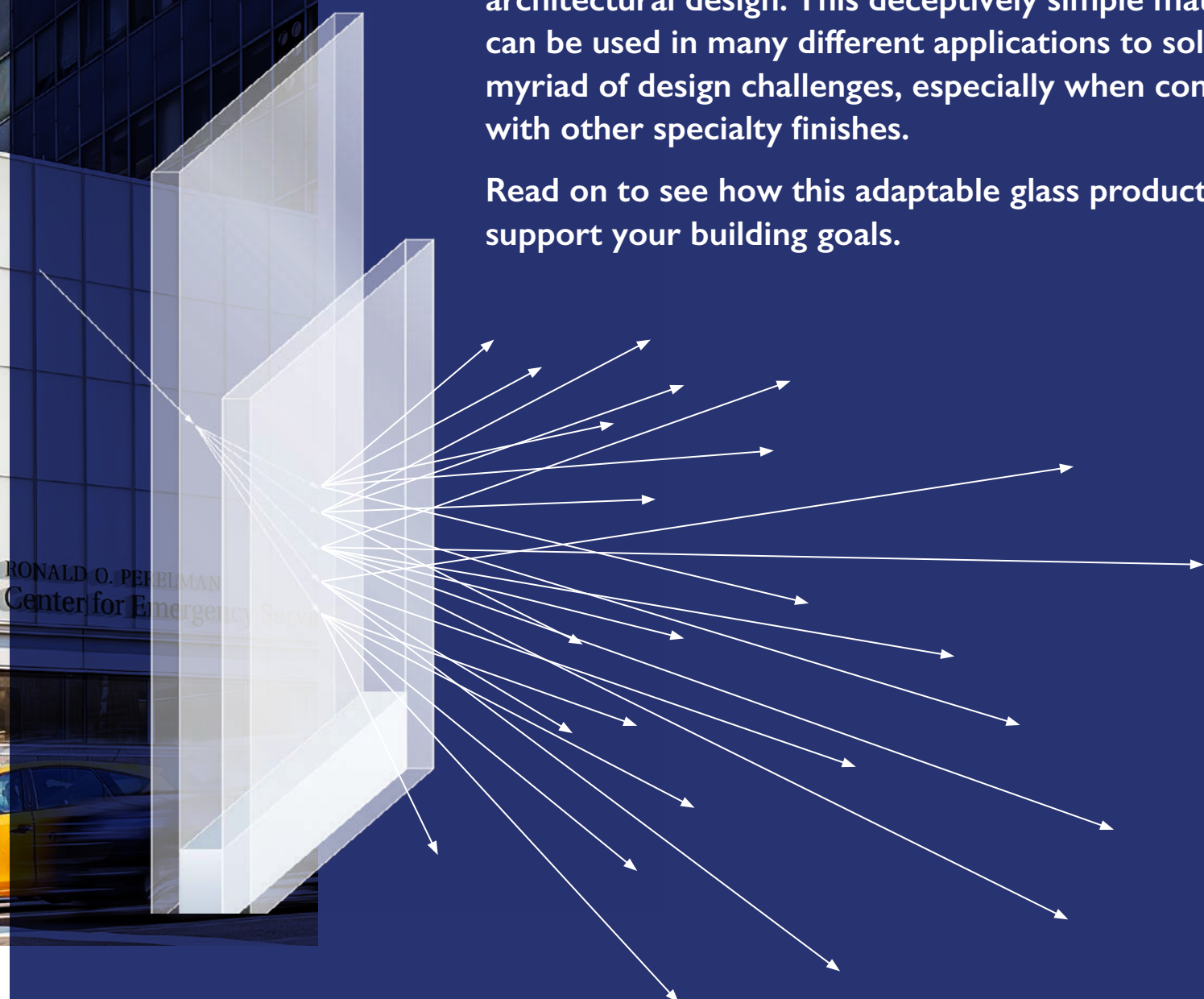




An introduction to acid-etched glass

Acid-etched glass offers countless possibilities for architectural design. This deceptively simple material can be used in many different applications to solve a myriad of design challenges, especially when combined with other specialty finishes.

Read on to see how this adaptable glass product can support your building goals.



What is acid-etched glass?

Gardner Walker is fully committed to environmentally responsible glass manufacturing, and we are groundbreakers in this space. Please see [Leaders in sustainable manufacturing](#) on page 44 to see what we're doing to protect the natural world.

Acid-etched glass is a glazing product on which one or more faces have been etched through exposure to an acidic solution. The treatment etches a molecule-thin layer of the glass, roughening the surface just enough to scatter light and give it a matte appearance. Manufacturers like Gardner Walker produce etched finishes of varying gloss and translucencies by altering the acidic solution used for etching.

On a full-surface etched product, the resulting glass feels smooth to the touch and has a uniform appearance. On a patterned product, the design is flush with the surrounding unetched glass. It is important to note that the frosted surface of acid-etched glass is not a coating. It is of one substance with the rest of the glass.

Where is it used?

Once upon a time, acid-etched glass was only for interiors. That's not the case anymore! These days, you'll find acid-etched glass in all sorts of exterior applications. Etched patterns can elevate window panes and help express the architect's vision. Full-surface etch appears in skylights, railings, and a myriad of other applications that benefit from high levels of light transference, without full transparency. It's also a popular option for spandrel, since it creates a continuous glass façade even between stories.

Benefits of acid-etched glass

The benefits

Why you should use acid-etched glass for exteriors

If you're designing a space that needs great daylight and durability, acid-etched could be perfect for you. In addition to its daylight-optimizing properties and sophisticated aesthetic, this long-lasting building material offers some serious advantages for sustainability. Paired with low-e it can help meet energy efficiency targets as well.

INRS Research Centre | Laval, QC

Glass: 6mm Starphire Ultra-Clear® glass with Walker Textures® Satin finish on surface I.



Benefits of acid-etched glass

Durability

Clients are often concerned about the longevity and maintenance requirements of the materials used in their buildings, and rightfully so. Repairing or replacing windows is a costly endeavour, and owners certainly don't want their buildings to look dirty or decrepit.

Fortunately, acid-etched glass is tougher and more resistant to dirt and stains than many of the glazing options on the market. This has a lot to do with how the glass is made. There's nothing added to the surface, so there's nothing to peel off or degrade. In fact, Walker Textures® full-surface etched glass outperforms regular float glass in tests of surface hardness and glass strength. You can see the numbers for yourself in our tables on the following pages, “[Acid-etched glass strength properties](#)” and “[Acid-etched glass resistance properties](#)”.

You can learn more in our article, “[5 Ways Acid-Etched Glass Offers More Durability than You Realized](#)”.

[Click here to read the article](#)

In projects like the INRS Centre Armand-Frappier Santé Biotechnologie in Laval, QC, Walker Textures® full-surface acid-etched glass has withstood fifteen years' worth of sun, snow, wind and rain without any degradation.



Barnard College Diana Center
New York City, NY

Glass: 6mm Starphire Ultra-Clear® glass with Walker Textures® full-surface Velour finish on surface 1, terra cotta paint on surface 2, Solarban® 60 low-e coating on surface 3.



Located on the corner of Broadway and West 120th in West Harlem, Barnard College's Diana Center is exposed to more than its share of smog, exhaust and urban grit. Yet despite over a decade of exposure, the building's acid-etched glazing still looks great. According to college staff, the building doesn't need any special treatment to look this good, either; it just takes a regular annual cleaning. This glazing may look fancy, but it's also a reliable, low-maintenance surface.

**For the full eGuide,
please download via the form below.**