

POLYCARBONATE AND ACRYLIC SHEET SOLUTIONS FOR HEALTH, SAFETY & WELFARE



AIA CEU Presentation



POLYVANTIS – WHO WE ARE

POLYVANTIS

Welcome to POLYVANTIS, where two industry leaders merge to redefine the world of high-quality films and sheets. As POLYVANTIS, our commitment is to shape the future with our customers and our vision is to be the most innovative and trusted leader of film and sheet products in the world.

Over 160 years
of combined
experience



15 world-class
plants globally



Over 1,500
global employees



5 global
technology
centers

LEXAN[™]
FILM & SHEET

ACRYLITE[®]



DISCLAIMER

Credit(s) earned on completion of this course will be reported to **AIA CES** for AIA members. Certificates of Completion for both AIA members and non-AIA members are available upon request.

This course is registered with **AIA CES** for continuing professional education. As such, it does not include content that may be deemed or construed to be an approval or endorsement by the AIA of any material of construction or any method or manner of handling, using, distributing, or dealing in any material or product.

Questions related to specific materials, methods, and services will be addressed at the conclusion of this presentation.



COURSE DESCRIPTION

This AIA-approved continuing education course explores the latest architectural design Polycarbonate products that are transforming the built environment. Participants will gain an understanding of product innovations that enhance building performance, contribute to sustainable design goals, elevate aesthetic value and provide health and safety.

The course provides an overview of key product categories including facade & roofing systems, interior finishes, daylighting solutions, and security options, with an emphasis on their application in modern architecture.

Through case studies and technical insights, architects will learn how to select and specify products that align with project goals, meet code requirements, and deliver long-term value.



LEARNING OBJECTIVES

At the end of this course, participants will be able to:

Examine the key product groups, product properties and value proposition of Polycarbonate and Acrylic sheet products.

Understand how product performance contributes to energy efficiency, durability, and health and safety.

Demonstrate how Polycarbonate and Acrylic sheets capitalize on sustainability within new-age demands.

Identify application areas where Polycarbonate and Acrylic sheets are used in architectural applications, where H, S & W objectives have been achieved.

PRESENTER

TONY BRAGG

Business Development Director
Architectural | Building & Construction
Americas



Tony has over 22 years of experience within the Building & Construction market and 16 years with POLYVANTIS in various roles across Australia, New Zealand and Asia. Tony has been working with the POLYVANTIS Americas team since May 2023.

SECTION 1: ACRYLIC AND POLYCARBONATE – AN OVERVIEW

TYPICAL PROPERTIES OF ACRYLIC & POLYCARBONATE SHEET

POLYVANTIS

		ACRYLIC	POLYCARBONATE
PERFORMANCE	PROPERTY		
 DESIGN & VISUAL PERFORMANCE	Brilliant optical clarity and aesthetics	✓	✓
	High light transmission	✓	✓
	UV stable for long-term performance	✓	✓
	Extensive portfolio of structures, coatings, colors, finishes, and dimensions	✓	✓
 FABRICATION & INSTALLATION	Cold-formable	Large radii only	✓
	Thermoformable for complex designs	✓	✓
	Can be laser-cut and flame-polished	✓	
	Lightweight, easy to install (½ the weight of glass)	✓	✓
	Cut with standard tools	✓	✓
 STRUCTURAL & THERMAL PERFORMANCE	High stiffness and rigidity – (acrylic higher)	✓	✓
	Impact resistance (compared to glass)	10-20x	up to 200x
	High thermal insulation (with multi-skin sheets)	✓	✓
 SAFETY PERFORMANCE	Excellent flame and smoke properties		✓
	Self-extinguishing		✓
	Low smoke emission, maintains visibility	✓	

Polycarbonate and acrylic sheet are among the most durable materials on the market today, offering hundreds of possible combinations of structure, color, coating and finish.



POLYCARBONATE PRODUCT GROUPS FOR ARCHITECTURAL DESIGN

Polycarbonate UV Protected Solid Sheet

Polycarbonate Hard coated Sheet

Polycarbonate Wall Protection

Polycarbonate Sign Grade Sheet

Polycarbonate Flame Retardant Sheet

Polycarbonate Security and Safety Glazing Sheet

Polycarbonate Corrugated Sheet

Polycarbonate Multiwall Sheet

Polycarbonate Multiwall Building Systems for
Façades

ACRYLIC PRODUCT GROUPS FOR ARCHITECTURAL DESIGN

Premium Acrylic Solid Sheet

Hard-Coated Acrylic Sheet

Heat Stopping Acrylic Sheet

High Recycled Content Acrylic Sheet

Light Diffusing Acrylic

UV-Blocking Acrylic Sheet

Acrylic block

Multi-skin and Wave Profile Acrylic Sheet

Acrylic Rods and Tubes

Sound-stopping Acrylic Barriers and Systems

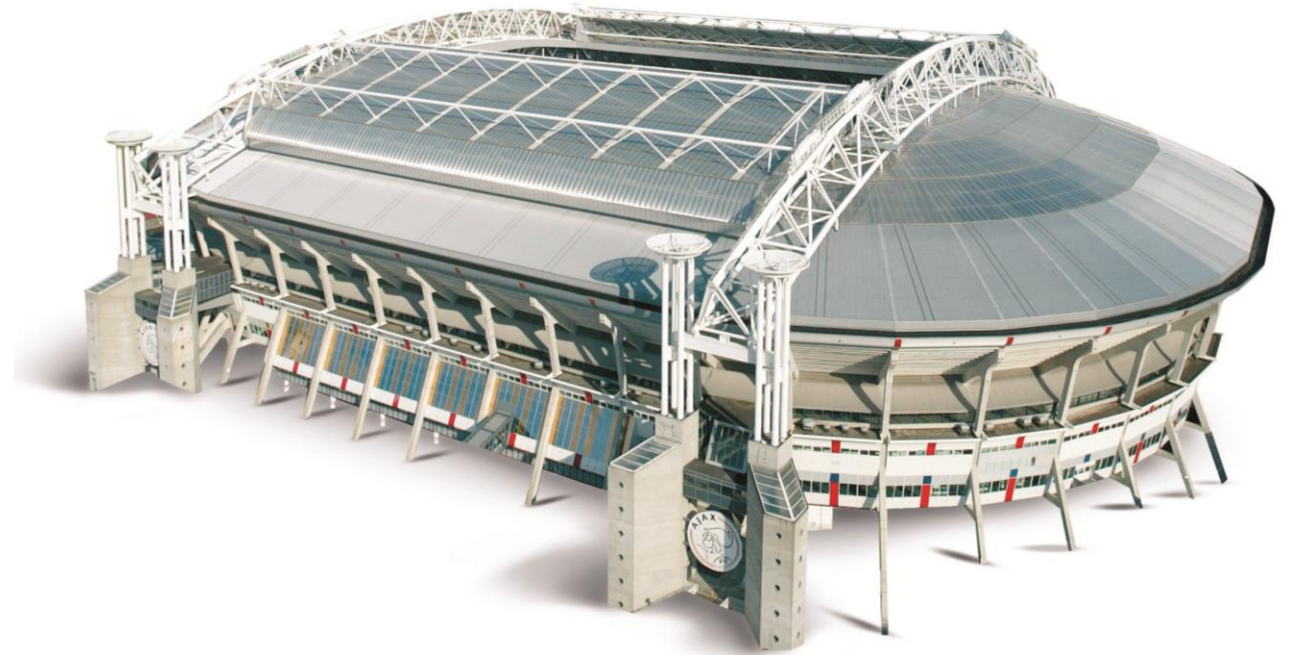
ACRYLIC & POLYCARBONATE SHEET APPLICATIONS

ADVANCING SUSTAINABLE ARCHITECTURE WITH POLYCARBONATE SHEETS

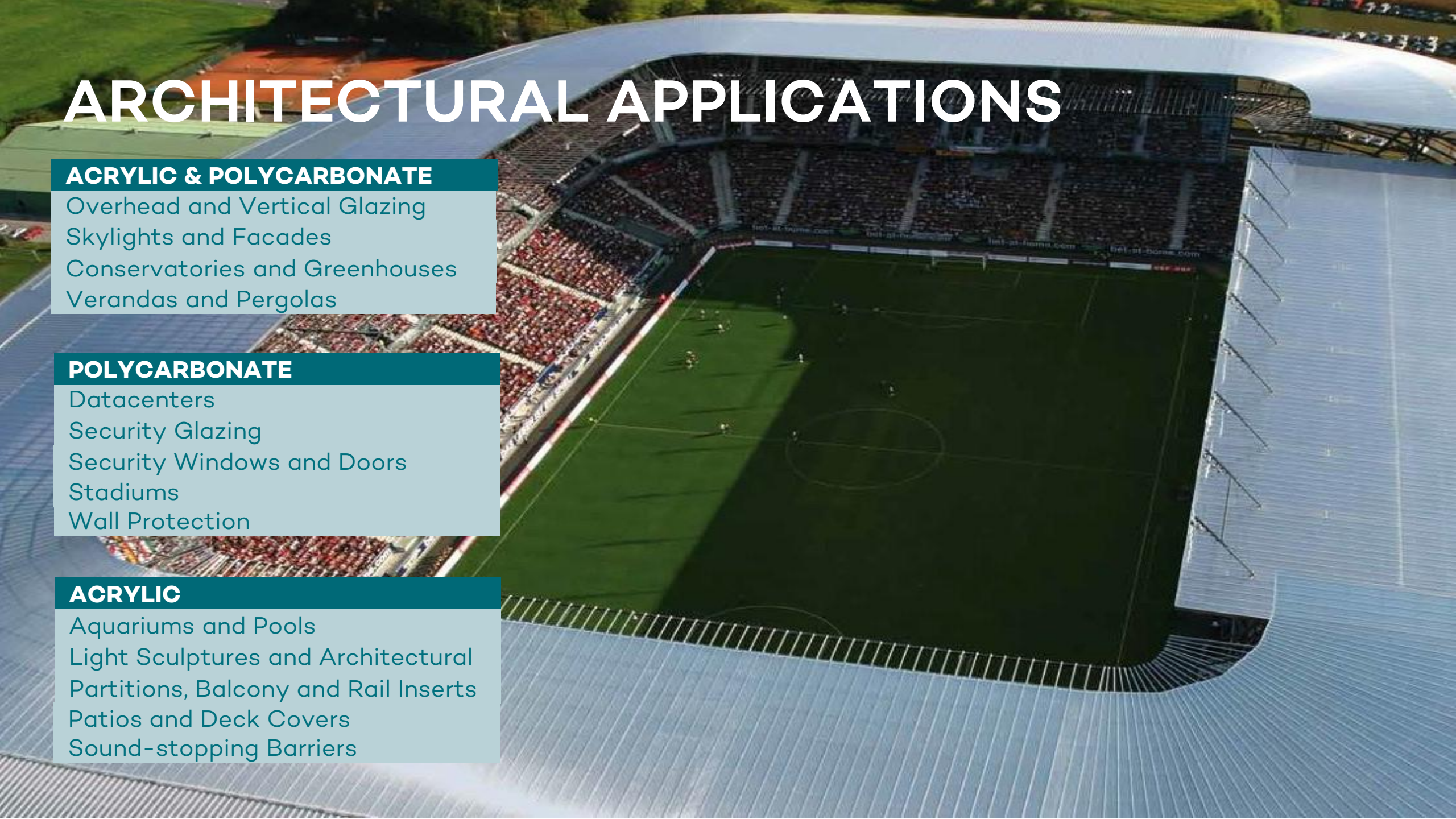
The use of plastic sheets, particularly polycarbonate and acrylic, in construction supports the global shift toward sustainable building practices. These materials promote energy efficiency, better living and working conditions, and a commitment to recycling, aligning with the growing demand for eco-conscious design.

Polycarbonate and acrylic solutions empower architects, builders, and contractors to create innovative, sustainable structures while meeting evolving regulatory standards. Their standout features—excellent thermal insulation, lightweight and recyclable composition, and ease of transport and installation—make them a smart choice for modern construction.

Incorporating polycarbonate and acrylic sheets enhances the sustainability profile of any project and contributes toward achieving LEED certification, a globally respected benchmark for green building performance.



ARCHITECTURAL APPLICATIONS



ACRYLIC & POLYCARBONATE

Overhead and Vertical Glazing
Skylights and Facades
Conservatories and Greenhouses
Verandas and Pergolas

POLYCARBONATE

Datacenters
Security Glazing
Security Windows and Doors
Stadiums
Wall Protection

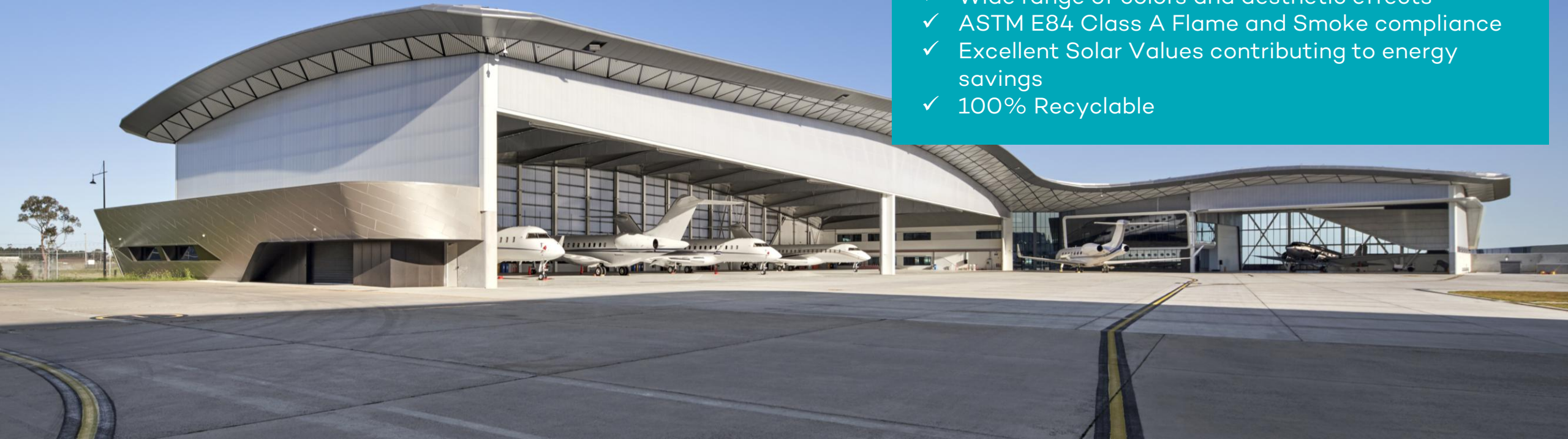
ACRYLIC

Aquariums and Pools
Light Sculptures and Architectural
Partitions, Balcony and Rail Inserts
Patios and Deck Covers
Sound-stopping Barriers

CASE STUDY: POLYCARBONATE BUILDING SYSTEMS FOR FAÇADES

The Melbourne Jet base, designed by COX Architecture, installed Polycarbonate Building Systems to construct a sustainable and state of the art facility. Delivering stringent wind loads, insulation, solar values, fire requirements whilst providing a modern aesthetic look.

- ✓ Unique five-wall with X-structure
- ✓ UV protected outer surface
- ✓ Great light transmission and light diffusion
- ✓ Extremely high stiffness
- ✓ Excellent thermal insulation of 1.27 W/m² K
- ✓ High impact strength
- ✓ 10-year limited warranty on breakage & weathering
- ✓ Easy and fast installation
- ✓ Wide range of colors and aesthetic effects
- ✓ ASTM E84 Class A Flame and Smoke compliance
- ✓ Excellent Solar Values contributing to energy savings
- ✓ 100% Recyclable





CASE STUDY: WAVE-PROFILE ACRYLIC ROOF

Delivering lasting structural integrity, seamless visual integration, and long-term protection against the elements.

SECTION 2: POLYCARBONATE AND ACRYLIC SHEET:

CONTRIBUTING TO HEALTH, SAFETY & WELFARE

HEALTH & SAFETY

The background image shows a modern architectural structure. It features a long, elevated walkway or bridge with a glass railing, supported by concrete pillars. The sky is blue with scattered white clouds. In the foreground, there are some green trees and a street lamp. The overall scene is bright and clear.

Polycarbonate and acrylic sheets are increasingly used in architectural and commercial applications due to their outstanding safety and health performance. Their properties support occupant well-being, building resilience, and code compliance in the following ways:

HEALTH & SAFETY: Acrylic Sheets

Impact Resistance & Safety Glazing - Acrylic offers high impact strength and shatter resistance compared to glass, helping reduce injury risks and enhance safety in public and high-traffic spaces.

Low Emissions in High-Heat Conditions - Even above softening temperatures or in case of fire, acrylic does not emit acutely toxic or carcinogenic fumes.

Non-off-gassing Material - Does not include adhesives, paints, or lacquers that may vaporize harmful chemicals over time.

Inherent UV Stability for Long-Term Performance - acrylic resists yellowing, brittleness, and strength loss, enabling decades of outdoor use while maintaining clarity and structural integrity.

Hygienic & Easy to Maintain - Its smooth, non-porous surface resists accumulation of mold and bacteria and cleans easily with mild, non-abrasive products. Well suited for healthcare, food service, and educational environments.



HEALTH & SAFETY

Polycarbonate Sheets

Impact Resistance & Safety Glazing - Polycarbonate offers near-unbreakable strength, shielding against impact, vandalism, and harsh weather—minimizing injury risks and enhancing safety in vulnerable areas.

Fire Safety - Fire-rated polycarbonate is self-extinguishing and meets key standards (e.g., UL94 V-0 – ASTM E84 Class A), helping slow flame spread and improving life safety in emergencies.

UV Protection & Natural Daylighting - UV-stabilized sheets block up to 99.9% of harmful ultraviolet rays, protecting building occupants and interior materials from prolonged exposure and degradation whilst allowing natural light to enter the building.

Thermal Performance - Multiwall and solid polycarbonate offers excellent insulation, enhancing indoor comfort and air quality by minimizing heat loss or gain.

Hygienic & Easy to Maintain - Non-porous and smooth surfaces resist bacterial growth and are easy to clean—ideal for healthcare, food service, and educational environments.

HARDCOATED POLYCARBONATE SHEET HEALTH, SECURITY & SAFETY

POTENTIAL BENEFITS



SAFETY AND SECURITY

Impact resistant and virtually unbreakable, which can help prevent injuries, vandalism, or potential harm to patients or staff



CHEMICAL RESISTANCE

Resistant to most moderate chemicals used in hospitals ensuring the material's durability



LIGHT WEIGHT AND EASY TO INSTALL

Less than half the weight of glass



EASY TO CLEAN

Withstands repeated cleaning with common UV resistance cleaning agents, which is crucial in healthcare settings where hygiene is a top priority



ABRASION RESISTANT

Excellent mar-resistance & UV protected (coated on 1 or 2 sides)



EXCELLENT OPTICAL CLARITY

Clear and tinted colors, with transparency up to 90%

HARD-COATED POLYCARBONATE SHEET – HEALTH & SAFETY

Exceptional Performance & Durability

- Combines impact-resistant polycarbonate with advanced abrasion and UV protection, while maintaining long-lasting optical clarity

Low Maintenance & Easy Restoration

- Improved chemical & graffiti-resistant surface restores easily to a like-new appearance

Weather & Security Resilience

- Superior resistance to weathering for outdoor and exposed environments
- Enhances protection against forced entry—ideal for high-security zones

Designed for Demanding Spaces

- Excellent choice for public and high-traffic areas, visibility and toughness:
 - Retail stores, schools, hospitals, psychiatric facilities, and transit shelters

Smart Coating Advantages

- Dual-side coating eliminates need for second-surface decoration
- Trades cold-forming for engineered stability and architectural use

Trusted Compliance Certifications

- Select grades meet recognized standards:
 - AAMA, ASTM E84, UL 972, Miami-Dade, CC1, and NY Office of Mental Health



	Test Method	% Haze		
		Uncoated Polycarbonate	LEXAN™ MARGARD™ MR5T Sheet	Glass
Taber Abrasion 100 Cycles CS 10F	ASTM D 1044 Z26.1	35.0	1-3	0.5



HARD-COATED ACRYLIC SHEET – HEALTH & SAFETY

Exceptional Clarity & Protection

- Premium grade acrylic with a hard coat on one or both sides. Resists abrasion, chemicals, and marring while maintaining brilliant optical clarity over time

UV Stability & Weather Resilience

- Inherently UV-stable, making it ideal for demanding indoor and outdoor environments where clarity and longevity matter

Lightweight Safety Solution

- More impact-resistant than glass and half the weight of glass, making it a safer alternative in vertical glazing or overhead applications

Built for Visibility in Public Spaces

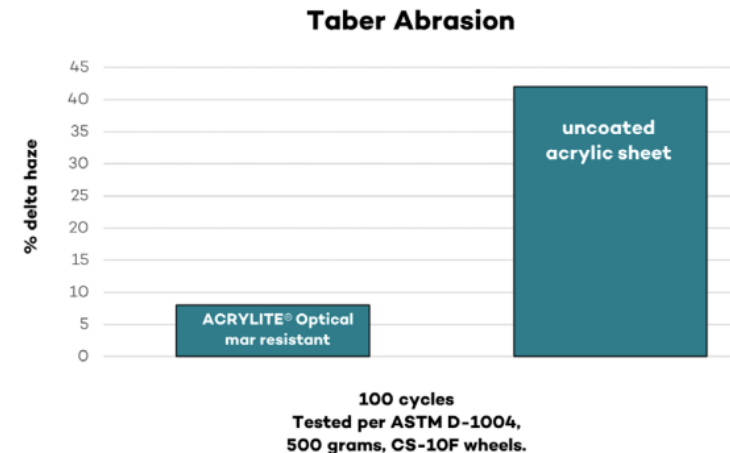
- Ideal for high-traffic, safety environments including retail storefronts, arenas, museums, schools, and healthcare and business settings

Low Maintenance for Health & Hygiene

- Smooth, hard-coated surface resists abrasion and supports frequent cleaning with standard disinfectants—promoting a sanitary environment in high-touch or public areas.

Meets Key Safety & Performance Standards

- 16CFR 1201, ANSI Z97.1, and ICC-ES ESR-1260



HIGH IMPACT POLYCARBONATE SHEET SOLUTIONS FOR HYGIENIC WALL PROTECTION

POTENTIAL BENEFITS



ENVIRONMENT

100% recyclable, "PVC Free" & non-chlorinated / non-brominated



ANTI-BACTERIAL ADDITIVES

There to stay for the entire lifetime



FIRE SAFETY AND EXCELLENT SMOKE PERFORMANCE

ASTM E84 Class A rating



EASY TO CLEAN AND DISINFECT

Withstands repeated cleaning with common hospital cleaning agents



DIGITAL PRINTING

Suitable for digital print applications



HIGH IMPACT STRENGTH AND ABRASION RESISTANCE

Virtually unbreakable (no requirement for reinstallation)



DURABILITY

10 year written limited warranty



EXCELLENT RESISTANCE

To common chemicals and stains including blood and urine



EASY TO INSTALL AND TO BEND

Thermoformable and capability for cold and hot line bending



FRIENDLY MATERIALS PRODUCT

Awarded with a GOLD medal by PMMT

DESIGN FLEXIBILITY & SAFETY

- ✓ Design freedom while still 200x stronger than glass
- ✓ Flexible with the option to install in curves, even under stress





Verrazano Bridge - New York

**TRANSPARENT ACRYLIC
NOISE BARRIERS FOR
BRIDGES, HIGHWAYS,
PEDESTRIAN WALKWAYS
& WIND BARRIERS.**



EC Row (Windsor, ON)



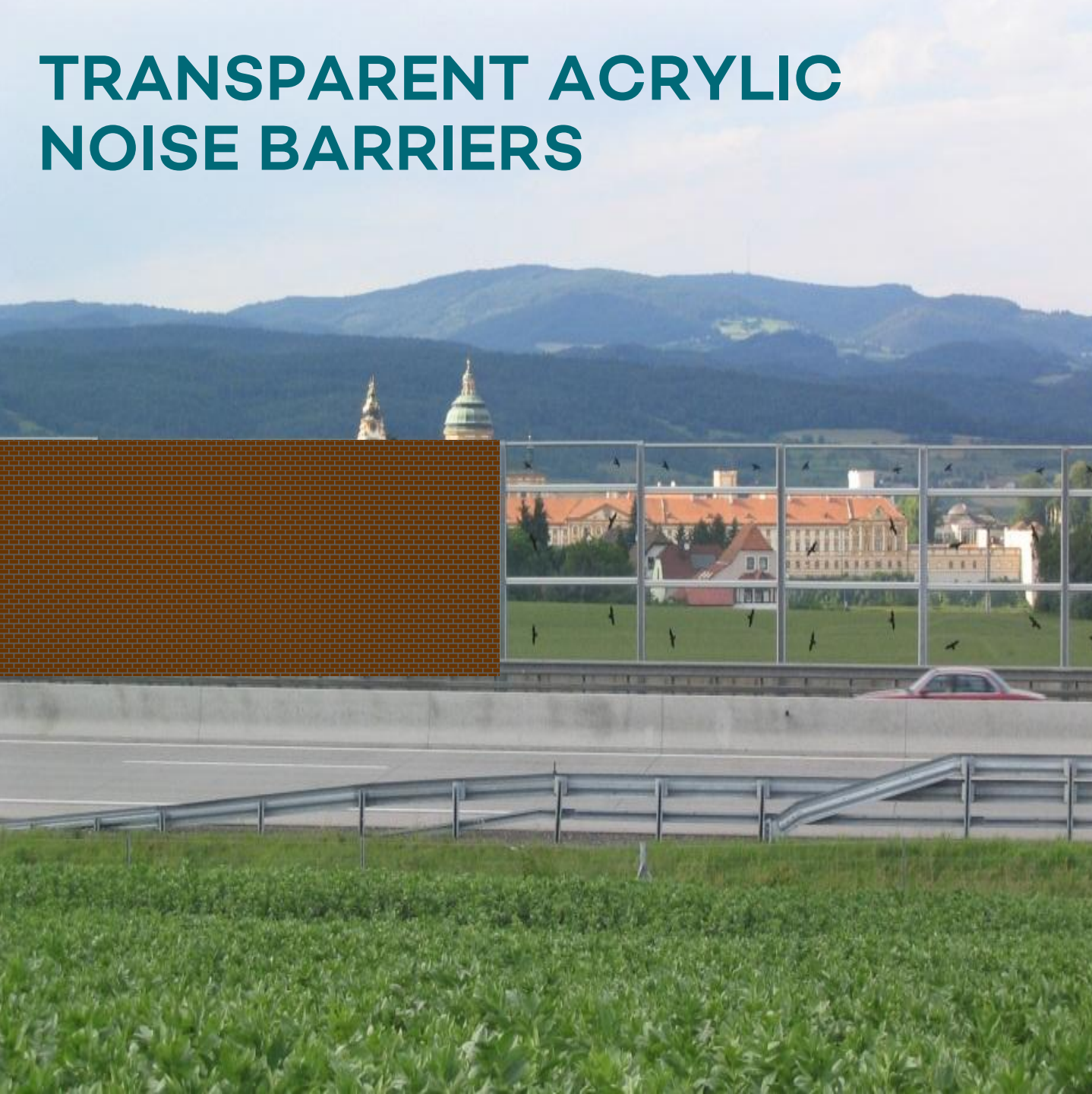
Edina, MN

TRANSPARENT ACRYLIC NOISE BARRIERS PROVIDE POSITIVE IMPACTS ON COMMUNITIES.



- **Preserves scenic views and natural daylight**
- **Ideal for tall barrier walls – minimizes shadowing and visual obstruction**
- **Avoids segmentation of neighborhoods**
- **Supports local businesses by ensuring street-level visibility**

TRANSPARENT ACRYLIC NOISE BARRIERS



SAFETY & PERFORMANCE BENEFITS

- Improves driver visibility of merging or oncoming traffic
- Reduces “tunnel effect,” supporting focus and driving comfort
- Crash-tested systems available for roadway safety compliance
- Enhances sightlines in complex layouts to reduce blind spots

STRUCTURAL EFFICIENCY

- Low dead load—well-suited for bridge and elevated applications
- Engineered solutions available for high-impact and crash-rated requirements

Which view would you prefer?



Unlike concrete barriers that block views and disconnect people from their environment, sound-stopping acrylic barriers reduce noise while preserving natural visibility. This promotes wellness, safety, and a more connected human experience.



MASH TL-4 CRASH-TESTED SYSTEM

- Meets updated AASHTO safety guidelines
- Offers a safe, lightweight system for use on bridges and elevated roadways
- Specifically required where a noise barrier is to be placed in the zone of intrusion
- Comes pre-assembled into drop-in style frames to fit in between W-style posts

WELFARE



Polycarbonate and acrylic also contribute to occupant welfare by enhancing comfort, daylight access, and energy efficiency. Their unique properties support wellness-focused design strategies in modern architectural spaces.

WELFARE

Polycarbonate and acrylic also contribute to occupant welfare by enhancing comfort, daylight access, and energy efficiency. Their unique properties support wellness-focused design strategies in modern architectural spaces.





ACRYLIC FOR OVERHEAD LIGHTING APPLICATIONS

- ✓ Uniform light distribution diffuses light, reduces glare, and enhances visual comfort
- ✓ Impact-modified acrylic resists breakage, reducing risk of injury
- ✓ Its lightweight minimizes structural load and supports safer installs compared to heavier glazing
- ✓ Low-VOC and Non-Toxic, contributing to use in sensitive environments





Daylight, Clarity & Lasting Form

with acrylic sheet

- ✓ Can be cold-formed or thermoformed to meet architectural design intent while preserving strength
- ✓ Maintains appearance and structural integrity without yellowing or brittleness over time
- ✓ Delivers unobstructed daylight and transparency for bright, open environments

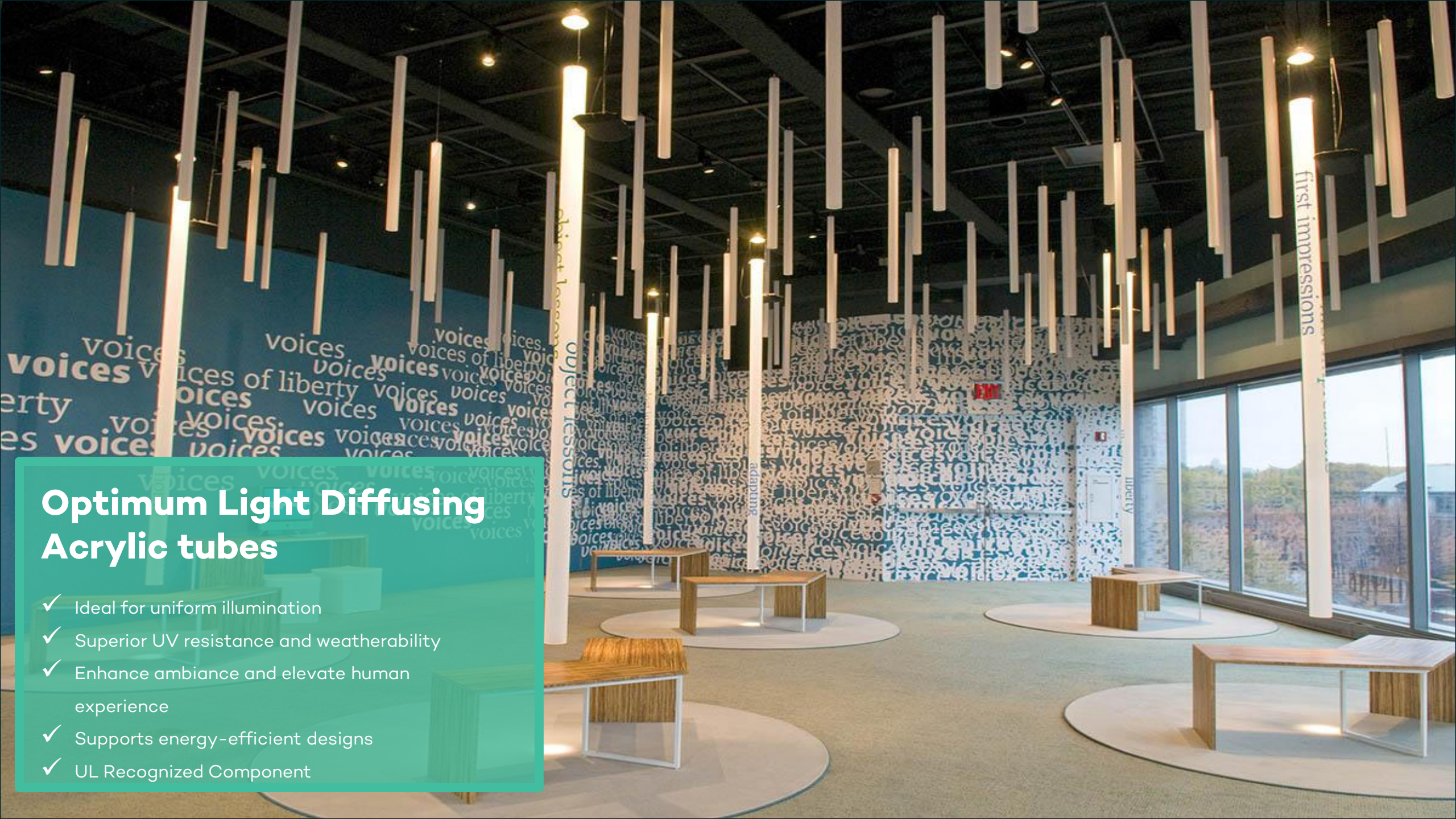


Interactive Hospital Walls

Temporal Synapse at Eskenazi Health in Indiana

Acrylic sheet and block transform hospital walls into healing experiences that combine durability and calming light diffusion to support patient well-being.





Optimum Light Diffusing Acrylic tubes

- ✓ Ideal for uniform illumination
- ✓ Superior UV resistance and weatherability
- ✓ Enhance ambiance and elevate human experience
- ✓ Supports energy-efficient designs
- ✓ UL Recognized Component

Sunlit Spaces Built to Last with Multi-Wall Acrylic

- ✓ High light transmission supports daylighting
- ✓ UV-blocking protects employees and customers from harmful UV light
- ✓ IR-reflecting reduces heat buildup inside the building

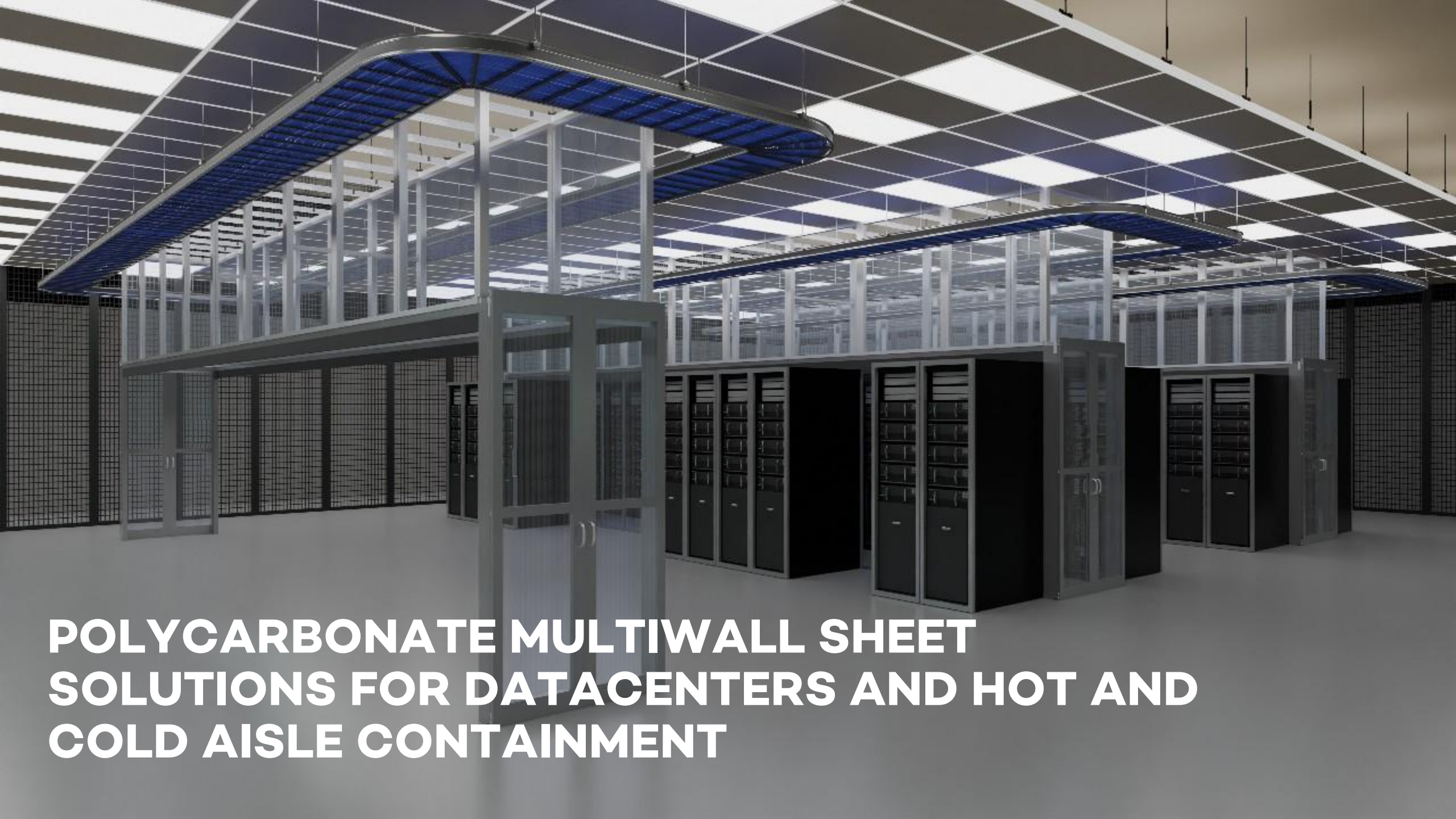




POLYCARBONATE MULTIWALL SHEET
SOLUTIONS FOR LARGE ARCHITECTURAL

ACRYLIC BLOCK FOR POOLS AND AQUARIUMS





**POLYCARBONATE MULTIWALL SHEET
SOLUTIONS FOR DATACENTERS AND HOT AND
COLD AISLE CONTAINMENT**



**MULTI-SKIN ACRYLIC FOR INSTITUTIONAL &
COMMERCIAL GREENHOUSES**

POLYCARBONATE SHEET – CLEANING INSTRUCTIONS

CLEANING PROCEDURE FOR SMALL AREAS MANUAL:

1. Gently wash the sheet with a solution of mild soap and lukewarm water, using a soft, grid free cloth or sponge to loosen any dirt or grime.
2. Fresh paint splashes, grease and smeared glazing compounds can be removed easily before drying by rubbing lightly with a soft cloth using petroleum ether (BP65), hexane or heptane. Afterwards, wash the sheet using mild soap and lukewarm water.
3. Scratches and minor abrasions can be minimized by using a mild automobile polish. We suggest that a test be made on a small area of LEXAN sheet with the polish selected and that the polish manufacturer's instructions be followed, prior to using the polish on the entire sheet.
4. Finally, thoroughly rinse with clean water to remove any cleaner residue and dry the surface with a soft cloth to prevent water spotting.

CLEANING PROCEDURE FOR LARGE AREAS AUTOMATED:

1. Clean the surface using a high pressure water cleaner (max. 100bar or 1,450psi) and/or a steam cleaner. We suggest that a test be made on a small area, prior to cleaning the entire sheet.
2. Use of additives to the water and/or steam should be avoided.



ACRYLIC SHEET – CLEANING INSTRUCTIONS



To Clean: Use a dishwashing liquid and a clean, damp microfiber cloth. Apply light pressure, rinse with clear water and blot dry with a damp chamois.

Grease, oil or tar may be removed with a good grade of hexane, aliphatic naphtha, or kerosene. These solvents may be obtained at a paint or hardware store and should be used in accordance with the manufacturer's recommendations.



Never Use: Window sprays, kitchen scouring compounds, or solvents such as acetone, gasoline, benzene or alcohol.



For hard-coated mar-resistant acrylic, use common household cleaners like Fantastik®, Glass Plus®, or Windex®



Remove fine scratches with a plastic cleaner polish such as Novus®

SECTION 3: ACRYLIC & POLYCARBONATE SHEET: SUSTAINABILITY AND COMPLIANCE

SUSTAINABILITY AND CONSERVING ENERGY

Polycarbonate and acrylic can enhance sustainability in various ways, including energy conservation and the potential for recyclability.

Energy-Efficient Building Solutions with Polycarbonate & Acrylic Sheets

Daylight & Insulation

Polycarbonate and acrylic multiwall sheets provide abundant natural light, UV protection, and thermal insulation (U-values from 0.89–1.5 W/m²K), reducing heating and cooling needs.

Smart Heat Control

Specialized PC glazing blocks infrared radiation – minimizing interior heat build-up, while acrylic glazing reduces solar energy by up to 75%, ideal for skylights, walkways, and roof domes.

Lightweight Advantage

LEXAN™ sheets are up to 2x lighter than glass with equivalent insulation, saving fuel in transport and simplifying structural design.

Low-Energy Manufacturing

Sheet extrusion uses significantly less energy than glass production, with typical processing temperatures around 240°C (464°F) for polycarbonate and 220–230°C (428°F–446°F) for acrylic, supporting lower environmental impact.



ACRYLIC & SUSTAINABILITY

Acrylic sheet contributes to sustainability through its long-lasting durability, inherent UV stability, recyclability, and environmentally responsible production. Key contributions include:

Long Service Life

Depending on the application, various durable grades maintain clarity and resist yellowing for decades, reducing replacement needs and conserving resources

Recyclability

Acrylic is 100% recyclable. It can be chemically broken down into high-purity MMA monomer or mechanically recycled into new products. This creates a circular economy by reducing waste and extending material life

Free of substances of very high concern (SVHC) per REACH guidelines.

Energy Efficiency

Acrylic's excellent light transmission and low U-values help to reduce the reliance on artificial lighting

Low Environmental Impact in Production

Production emissions and wastewater are treated or minimized; scrap is reused when possible

Non-hazardous Waste

ACRYLITE® is not classified as hazardous or special waste, simplifying end-of-life disposal

Supports Low-Carbon, High-Performance Design

Lightweight composition and long service life reduce embodied carbon in both transportation and structural systems—helping projects meet sustainability goals and certifications



POLYCARBONATE & SUSTAINABILITY

Polycarbonate sheets contribute to sustainability in several meaningful ways due to its durability, recyclability, long life span and energy savings efficiencies. Here are the key contributions:

Long Lifespan

Resistant to impact, weathering, and UV degradation, polycarbonate products last for years, reducing the need for replacements and conserving resources.

Lightweight Material

Its low weight compared to glass or metal reduces energy consumption during transportation and lowers structural support needs in buildings.

Energy Efficiency

High thermal insulation properties help reduce heating and cooling demands in buildings (e.g., polycarbonate glazing and roofing panels and datacenter aisle containment).

Recyclability

Polycarbonate is 100% recyclable. Scrap material can be collected, reprocessed, and reused in new products, reducing landfill waste.

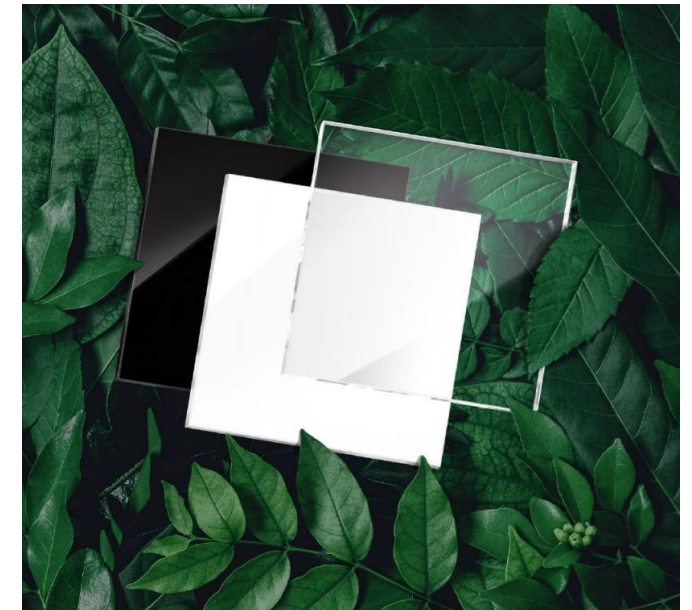
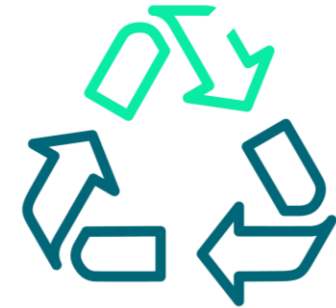
Lower Carbon Footprint Over Lifecycle

Its longevity and energy-saving properties often result in a lower total environmental impact compared to shorter-lived or less efficient materials.

SUSTAINABLE ACRYLIC WITH ARCHITECTURAL PERFORMANCE

High Recycled Content Acrylic

- **Post-Industrial Recycled Content** - contains a minimum of 95% recycled MMA content, supporting circularity without compromising quality
- **Architectural-Grade Performance** - offers the same strength, clarity, and UV stability as standard
- **Contributes to LEED and Green Building Goals** by supporting materials and resources credits through recycled content and regional manufacturing
- **Safe & Inert Material** - no VOCs, plasticizers, or hazardous additives; does not off-gas and is safe for sensitive environments.
- **Lower Carbon Footprint** - recycled content and domestic production contribute to reduced embodied carbon and shorter supply chains.

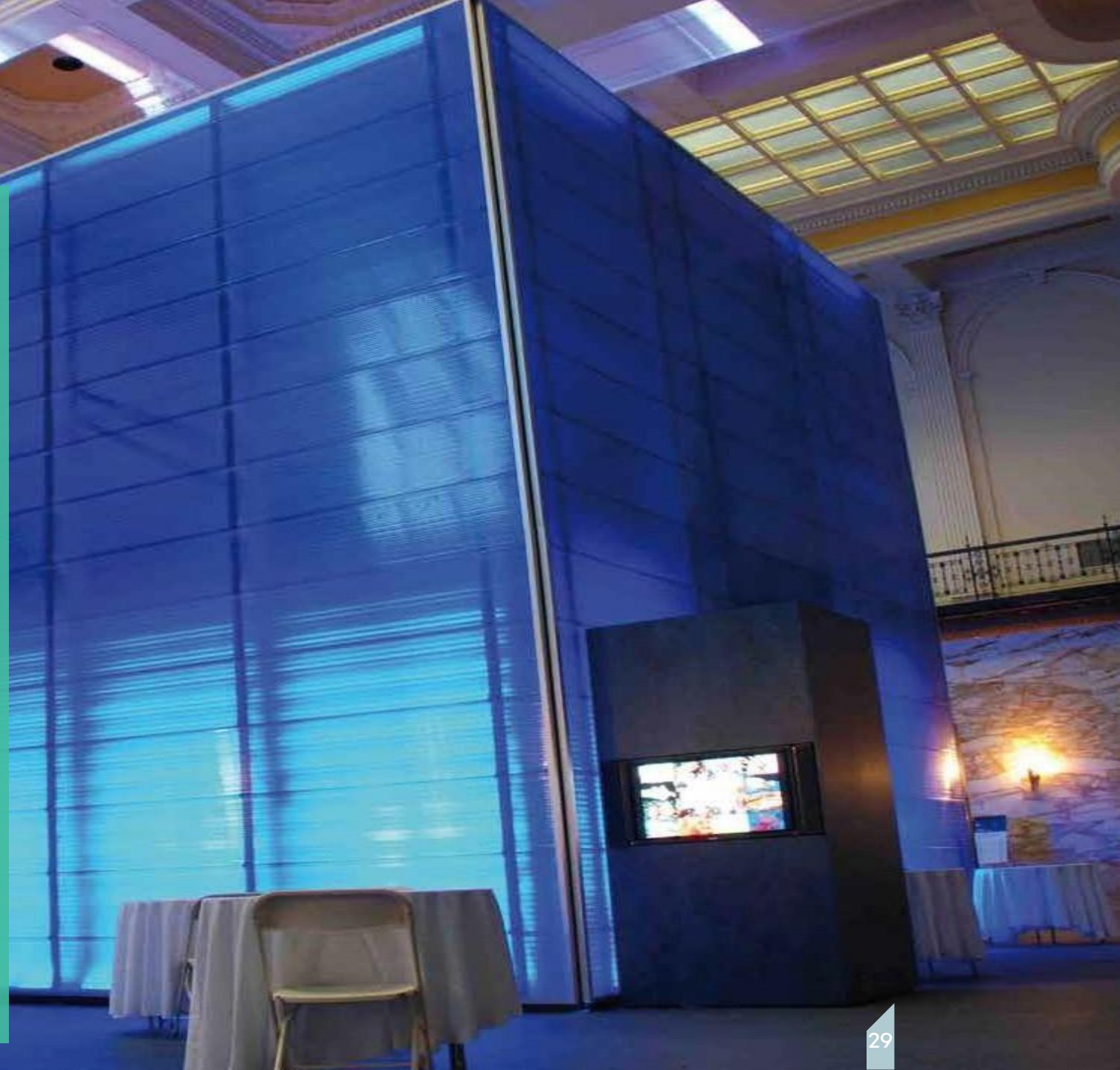


CASE STUDY: BLUE CUBE

Massachusetts — Ocean Explorium at New Bedford Seaport

The New Bedford Seaport, historically recognized as the “Whaling City,” has transformed into a center for marine education. In partnership with the University of Massachusetts Dartmouth and the New Bedford Oceanarium, the Ocean Explorium introduces the Blue World Pavilion—an advanced educational exhibit featuring a suspended, three-dimensional planetary model.

To enclose this dynamic display, the Ocean Explorium engaged an exhibit design firm, which collaborated with EXTECH/Exterior Technologies to create a translucent cube structure. The enclosure utilizes a polycarbonate sheet system that is lightweight, durable, and 100% recyclable. Compliant with ASTM E84 Class A standards, this material significantly reduces installation time, cost, and structural requirements



QUESTIONS

1. Design Flexibility – How can polycarbonate be formed?

- A. Cold bended
- B. Thermoformed
- C. All the above

2. What benefits does coating technology provide Polycarbonate and Acrylic?

- A. Graffiti and Mar Resistance
- B. Chemical Resistance
- C. Increased UV protection
- D. All the above

3. What's the key value proposition related to Polycarbonate in Health & Safety Applications?

- A. Hygienic & Easy to Maintain
- B. Fire Safety
- C. Impact Resistance
- D. All the above

4. What is the strength of polycarbonate versus glass?

- A. 2x
- B. 10x
- C. 20x
- D. 200x

5. How does Acrylic contribute to sustainability?

- A. Energy Efficiency
- B. Reduced Plastic Use
- C. Long Lifespan
- D. A and C

6. Does Polycarbonate have a good fit in Facades?

- A. Yes, due to the sheet's high stiffness
- B. Yes, due to its high thermal insulation
- C. Yes, ease of installation
- D. All the above?

7. Which qualities make Polycarbonate suited for Datacenter solutions?

- A. Great thermal insulation
- B. ASTM E84 rated
- C. Superior impact resistance
- D. All the above

QUESTIONS

8. With what kind of cleaning agents can you clean Acrylic and Polycarbonate?

- A. Water
- B. Mild Soap
- C. Benzine
- D. Only A. & B.

9. Which of the following is a key *Health and Safety* benefit of acrylic glazing materials?

- A. They resist shattering, reducing the risk of injury
- B. They provide impact resistance and UV protection
- C. They are less expensive than all other materials
- D. A and B

10. How do acrylic products like multi-wall sheets and light-diffusing tubes support Welfare in architectural design?

- A. By blocking natural light completely
- B. By enhancing access to daylight and improving visual comfort
- C. By increasing the weight of building structures
- D. By requiring frequent replacement



Please submit your answers and AIA member number to tony.bragg@polyvantis.com

In case you have any questions, please call
+1 929 658 1255

THANK YOU!

POLYVANTIS

LEXAN™ POLYCARBONATE AND
ACRYLITE® ACRYLIC SHEET

*SOLUTIONS FOR HEALTH, SAFETY &
WELFARE*

LEXAN™

POLYCARBONATE FILM & SHEET

Tough,
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