

# ACRYLITE®

for architecture



ACRYLITE® 



# Define your vision with ACRYLITE® building and design products

Architects and designers throughout the world have long admired acrylic for its versatility in endless design applications. Those who demand the best choose ACRYLITE®.

As a world leader in acrylic technology, Evonik, the maker of ACRYLITE®, has leveraged over 40 years of industry experience to create the most advanced line of uncompromising high-impact acrylic sheets and design products.

ACRYLITE® acrylic multi-skin sheet and other design products are German-engineered and provide design elements that are lightweight, easily fabricated and extremely impact and weather resistant.

But perhaps the biggest reason for the growing popularity of ACRYLITE® products within the design community is their incredible ability to transmit soft, filtered light. Where light plays a key role in the spatial experience, ACRYLITE® products offer the most freedom in imagination and design.

Sophisticated, stylish and extremely versatile, let ACRYLITE® help define your vision.



**Cover:** 16 mm ACRYLITE® Alltop UVT acrylic double-skin sheet and 16 mm ACRYLITE Resist high impact acrylic double-skin in clear, white and bronze are showcased on the exterior of the Philadelphia Zoo's McNeil Avian Centre. Architect: Portico Group. Photo Credit: Tom Crane Photography Inc. **Left:** Light transmitting 16 mm ACRYLITE® Resist high impact acrylic double-skin in light white installed on the exterior provides soft illumination to the neighbourhood. Architect: Sander Architects, LLC. Photo Credit: Sharon Risedorph. **Above Left:** 8 mm ACRYLITE® Resist high impact acrylic double-skin sheet in manhattan satin is featured in Joe Fresh New York. Architect: Burdifilek. Photo Credit: Ben Rahn/A-Frame. **Above Right:** Light floods through 16 mm ACRYLITE® Resist high impact acrylic double-skin sheet at Myriad Botanical Gardens, Oklahoma City. Architect: Glover Smith Bode Inc. Photo Credit: McNeese Fitzgerald Associates.





ACRYLITE® encourages  
design innovation

# ACRYLITE®: Your partner in innovative design

For decades Evonik, the makers of ACRYLITE® have offered the highest quality acrylic products and services to the interior design and architectural construction communities.

Throughout the world, ACRYLITE® acrylic multi-skin sheet has been used extensively in the design and construction of:

- Museums
- Libraries
- Hotels
- Restaurants
- Office buildings
- Outdoor leisure spaces
- Retail facilities
- Private residences

In addition, ACRYLITE®'s unique line of acrylic rods and tubes offer endless inspiration for creative lighting solutions, retail fixtures and point-of-purchase displays.

ACRYLITE® products have a number of features that make them a preferred solution within the design community:

- Incredible ability to transmit light
- Exceptional weatherability
- High impact resistance
- Ease of customization and fabrication
- Low structural weight

ACRYLITE® encourages innovation. Whether your project is structural or decorative, indoors or out, on the ground or overhead, curved or straight, there is an ACRYLITE® product that will communicate your unique design vision.



**Left:** Racine Art Museum. 16 mm ACRYLITE® Resist high impact acrylic double-skin in light white allows natural light into the Museum. Design: Brininstool+Lynch. Photo Credit: Christopher Barrett, Hedrich Blessing. **Above Left:** Timber construction and 16 mm ACRYLITE® Resist high impact acrylic double-skin in light white, are featured in this chalet-style roof. Design/Build: Natural Light Patio Covers. **Above Right:** Floor to ceiling 16 mm ACRYLITE® Resist high impact acrylic double-skin in light white, provide an unobtrusive safety barrier for an interior stairwell. Designer: Simmer Design + Project Management. Photo Credit: Brenda Liu.



Design solutions for interior  
and outdoor applications



## Creative design solutions

Today's architects and designers are being charged with designing solutions that address a growing number of client priorities. ACRYLITE® products offer a wide range of options to assist in addressing many of the priorities associated with the design and construction of buildings, interior spaces and outdoor areas.

### Natural light transmission

ACRYLITE® acrylic multi-skin sheet maximizes light and brightness, even in dim areas, allowing for the presence of light in the design to be easily explored and expressed. ACRYLITE®'s incredible visual clarity and clean lines come without the disadvantages of glass or other materials, including the need for excessive shading or diffusing elements to prevent reflection and glare. The options for lightscaping, wall illumination, backlighting, toplighting, and cosmetic detailing are limitless.

### Visual elevation of overhead spaces

Transform dark, enclosed-feeling spaces almost instantly by integrating ACRYLITE® acrylic multi-skin sheet into overhead designs. ACRYLITE® allows spaces to be opened up to the sky, cascading it with beautiful, natural light.



**Left:** ACRYLITE® Resist high impact acrylic multi-skin sheet provides a subtle link to the outdoors in Cleft House. Architect: Culver Architects Inc. Photo Credit: Leslie Jay Bosch Photography. **Above Left:** Luminescent six-column display located outside the Phoenix Civic Center features ACRYLITE® Satinice acrylic tubes. **Above Right:** 16 mm ACRYLITE® Resist high impact acrylic double-skin sheet is featured on exterior of the Waukesha Public Library. Architect: Frye Gillan Molinaro Architects. System Designer: AFX, a division of Sign Effectz, Inc.





ACRYLITE® provides  
light and longevity



## Privacy

Create beautiful daylighting without sacrificing privacy with ACRYLITE® acrylic multi-skin sheet. Available in a range of translucent options with a broad range of tints and surface textures, ACRYLITE® is an attractive alternative to provide privacy from exterior windows as well as interior traffic.

## Protection from the elements

Indoors and out, ACRYLITE® acrylic multi-skin sheet offers superior protection from North America's extreme weather conditions. When used in outdoor spaces to create a protective canopy, ACRYLITE® can block up to 80 per cent of the sun's heat while also obstructing harmful UV rays. The panels can also be used to create a protective break from howling winds and blowing rain or snow.

Their ability to block harmful UV rays also makes ACRYLITE® acrylic multi-skin sheet an ideal solution to protect interiors from the fading and damage that can result from sunlight.

## Highlighting architectural elements

From accenting interesting facades to drawing the eye with attention-grabbing fixtures, architects and designers throughout the world turn to ACRYLITE® building products for a no-compromise solution that allows them to incorporate light in expressing their unique vision.

## Eye-catching architectural lighting solutions

Lighting plays an integral role in every design project, and ACRYLITE® helps accomplish both aesthetic and functional lighting design objectives. In addition

to providing superior light transmission, ACRYLITE®'s unique line of acrylic rods and tubes produce excellent light diffusion, offering endless inspiration for creative architectural lighting solutions.

## Environmental sustainability

ACRYLITE® acrylic multi-skin sheet's natural heat insulating qualities can translate into significant energy savings, making them an ideal choice for eco-lighting and building green. The sheets are built to last using environmentally sound manufacturing processes in facilities that have received ISO-14001 environmental certification. In addition, if the time does come for replacement, ACRYLITE® can be recycled for use in the manufacture of consumer goods.



**Left:** 16 mm ACRYLITE® Resist high impact acrylic double-skin sheet in clear and solar cool white, provides a stunning backdrop to performances at Myriad Botanical Gardens. Architect: Glover Smith Bode Inc. Photo Credit: McNeese Fitzgerald Associates.

**Above:** ACRYLITE® acrylic tubes on the exterior of the Omni Dallas Hotel add a colourful touch to the city skyline. Design Architect: 5Gstudio collaborative. Architect of Record: BOKA Powell. Photo Credit: David Worthington.

ACRYLITE® offers designers and architects a family of sophisticated, stylish and extremely versatile products to help communicate their design vision.





# ACRYLITE® acrylic multi-skin sheet

ACRYLITE® offers a range of acrylic sheet for use in the design and construction of commercial, institutional, industrial and residential buildings throughout the world.

## ACRYLITE® acrylic multi-skin sheet

ACRYLITE® acrylic multi-skin sheet's natural heat insulating qualities translate into significant energy savings, making them a natural choice for eco-lighting and building green.

- Available in a range of thicknesses and rib spacings
- Wide selection of colours
- High load carrying capabilities
- Quick and easy installation
- Great strength to weight ratio

## ACRYLITE® acrylic wave profile

ACRYLITE® acrylic wave profile is a tough, versatile single-skinned sheet designed for great style and protection.

- Distinct, stylish appearance
- Quick and easy install
- Best for overhead and vertical use
- Can be point fastened
- Special weatherseal calottes and fasteners available

## ACRYLITE® acrylic multi-skin sheet assembly system

ACRYLITE® offers an assembly system specifically designed for use with its multi-skin acrylic sheet. This gasketed system allows for the natural thermal expansion of acrylic without constriction or compromising the seal. Easily adaptable to specific design requirements, this system is an excellent choice for projects that need to be weather tight. Consult with an ACRYLITE® building products representative on your project's design, function, and requirements for help in selecting an appropriate assembly system.



**Left:** Joe Fresh New York. 8 mm ACRYLITE® Resist high impact acrylic double-skin sheet in manhattan satin. Architect: Burdifikel. Photo Credit: Ben Rahn/A-Frame **Above Left:** 16 mm ACRYLITE® Resist high impact acrylic double-skin sheet. **Above Centre:** 3 mm ACRYLITE® Resist high impact acrylic wave profile. **Above Right:** 32 mm ACRYLITE® Resist high impact acrylic quad-skin sheet.





# ACRYLITE® acrylic rods and tubes

ACRYLITE® acrylic rods and tubes have become the material of choice in the architectural lighting industry.

## ACRYLITE® acrylic tubes

ACRYLITE® acrylic tubes' exceptional clarity and durability as well as their attractive price point make them an ideal solution for a wide range of architectural lighting applications.

- Optical clarity allows for a clear view of details in displays.
- 11 times stronger than glass and break resistant
- Weather resistance makes them ideal for outdoor lighting applications
- Superior light transmission and light diffusion properties for a large variety of indoor lighting applications
- Suitable for food contact and ideal for displaying food
- Available in stock in a variety of diameters from 2" (51 mm) to 12" (305 mm) and special order up to 20" (500 mm)

## ACRYLITE® Satinice acrylic tubes

ACRYLITE® Satinice acrylic tubes offer a frosted, textured surface and excellent light diffusing properties while maintaining high light transmission and creating unique special effects. This unique surface finish also hides fingerprints and scratches. This combination of features makes them well suited for exterior and interior architectural lighting applications.

## ACRYLITE® acrylic rods

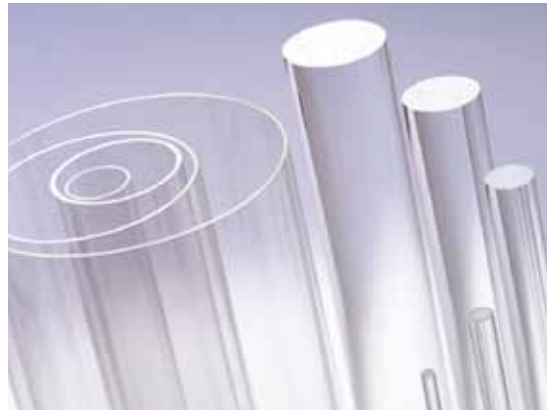
ACRYLITE® rods offer pristine optical clarity, providing beautiful light transmission and light diffusion properties.

- 11 times stronger than glass and break resistant
- Smooth jewel-like finish
- Weather resistance makes them ideal for outdoor lighting applications

- Lightweight at half the weight of glass
- Available in sizes ranging from .472" (12 mm) to 2.00" (50 mm)
- Custom color choices available in transparent, translucent, fluorescent or opaque grades

## ACRYLITE® LED EndLighten rods

Building upon the features and benefits of ACRYLITE®'s clear rods, EndLighten rods are the only product on the market today offering light transmission that travels the full length of the rod while maintaining it's strength of illumination. ACRYLITE® LED rods can be customized through thermoforming and also offer energy savings when used with high-powered LED's.



**Left:** ACRYLITE® acrylic tubes light up the Omni Dallas Hotel and the Dallas streetscape. Design Architect: 5Gstudio collaborative. Architect of Record: BOKA Powell. Photo Credit: Lyn Caudle. **Above Left:** ACRYLITE® acrylic rods offer superior light transmission. **Above Centre:** ACRYLITE® acrylic tubes and ACRYLITE® acrylic rods are 11 times stronger than glass and break resistant. **Above Right:** ACRYLITE® acrylic tubes are ideal for both indoor and outdoor lighting applications.



ACRYLITE® provides  
inspiration without  
compromise



## Inspiration without compromise

As you source product to execute your unique design vision, the number of choices can be overwhelming. If your goal is inspiration without compromise, ACRYLITE® is the clear choice.

### Structural properties that promote innovative design

Imagine working with a product that transmits beautiful light, without the constraints associated with materials like glass and plastic. ACRYLITE® products are lightweight, bendable, easily fabricated, impact resistant and can withstand the worst of North American weather, offering the freedom to let your imagination and your designs soar.

### Strength and durability

Perpetual heat waves, gale force winds, damaging hail, torrential rains and heavy winter snow are no match for ACRYLITE® acrylic multi-skin sheet. Our German-engineered and manufactured products are made with the most weatherable polymer available and have unique properties that help them excel in the most extreme North American weather.



**Left:** Fashion designer Elie Tahari chose 8 mm ACRYLITE® Resist high impact acrylic double-skin sheet in manhattan satin to provide diffused light transmission to his New York City design studio. Design: Highland Associates. Photo Credit: Adrian Wilson.

**Above left:** ACRYLITE® Satinice acrylic tubes combined with LEDs. Jewish Heritage Museum, New York City. Designed by

C&G Partners and Potion. Photo courtesy of Melanie Einzig. **Above Right:** The Tommy Car Wash system features 8 mm ACRYLITE® Resist high impact acrylic double-skin sheet in clear and provides safe and weatherable glazing and a bright interior environment.





## Never yellows

ACRYLITE® acrylic will not yellow, become brittle or degrade – a promise we back with our 30 year no-yellowing guarantee – the best in the industry.

Yellowing of plastics is caused by the sun's UV rays, but ACRYLITE® acrylic is 100% naturally UV-stable. Polycarbonate and other plastic covers need a UV barrier or coating to delay yellowing, but must often they need to be replaced after a few years of installation because they have turned yellow. UV barriers are often thin and are highly prone to failure. But ACRYLITE® acrylic is composed of 100% naturally UV-stable molecules throughout the material that stabilizes it from the inside out and protects the entire sheet, not just its surface.

To see the difference for yourself, ask us for our comparison kit containing samples of ACRYLITE® and polycarbonate that have been exposed to the elements for the same number of years.

## Protection from hail

ACRYLITE® Resist is strong enough to withstand hail impact – a promise that we back with our 10 year warranty. In fact, because our proprietary polymers are 10 times more impact resistant than traditional acrylics, our hail warranty is not prorated. Glass and weathered, fragile polycarbonate cannot offer this same degree of protection from damaging hail.

## Professional guidance

ACRYLITE® building products have been used throughout the world, resulting in a team of representatives that are specialists in the design, installation and maintenance of ACRYLITE®. Our clients benefit from this knowledge and experience and can be confident that the ACRYLITE® team will be there to support them through all stages of their project.

## A safer solution

Both during and after installation, ACRYLITE®'s exceptional strength makes it a safer alternative to glass. Should an ACRYLITE® acrylic multi-skin sheet be subjected to impact beyond the limits of its resistance, it will not shatter into small slivers like glass, but will break into large pieces.

## Life expectancy of 30+ years

Your clients entrust you to recommend products that are a wise investment. ACRYLITE® acrylic has been proven to perform consistently over decades of use in all types of climates throughout the world. ACRYLITE® acrylic's long service life means you can confidently assure clients of reduced replacement costs when compared to materials that must be replaced more frequently.

## Environmental sustainability

ACRYLITE® acrylic multi-skin sheet's natural heat insulating qualities can translate into significant energy savings, making them an ideal choice for eco-lighting and building green. The sheets are built to last using environmentally sound manufacturing processes in facilities that have received ISO-14001 environmental certification. In addition, if the time does come for replacement, ACRYLITE® can be recycled for use in the manufacture of consumer goods.

Upon combustion, other plastic coverings produce thick smoke and toxic gases that are harmful to people and the environment. Deterioration from UV rays changes the burning characteristics in many plastics, but thanks to ACRYLITE®'s UV stability, its characteristics do not, so in the event of fire, ACRYLITE® burns cleaner with less smoke and no release of toxic or corrosive gases.

## The BEST warranties in the industry

ACRYLITE® acrylic multi-skin sheet is backed by the industry's best warranties. Our non-prorated, full replacement 30 year non-yellowing, 10 year light transmission and 10 year hail warranties protect both your investment in ACRYLITE® and your client's bottom line.

### Learn more

Let our experienced and knowledgeable team assist you in determining which ACRYLITE® product is right for your project. Learn more or request samples by calling 1-800-631-5384 or visiting [www.acrylitebuildingproducts.com](http://www.acrylitebuildingproducts.com)

**Left:** 16 mm ACRYLITE® Resist acrylic high impact double-skin sheet in clear opens this European office's cathedral-inspired space to the sky.

# ACRYLITE® Selection Chart

## ACRYLITE® acrylic multi-skin sheet

	ACRYLITE® Resist			ACRYLITE® Alltop		
	8 mm ACRYLITE® Resist high impact acrylic double-skin sheet	16 mm ACRYLITE® Resist high impact acrylic double-skin sheet	32 mm ACRYLITE® Resist high impact acrylic quad-skin sheet	16 mm ACRYLITE® Alltop high impact acrylic double-skin sheet	16 mm ACRYLITE® Alltop UV transmitting acrylic double-skin sheet	16 mm ACRYLITE® Alltop UV absorbing acrylic double-skin sheet
Light Transmittance (clear)	84%	86%	76%	89%	91%	91%
Light Transmittance (Other Colors)	light white - 62%	light white - 74% bronze - 53% solar cool white - 37%	light white - 64%	N/A	N/A	N/A
UV Blocking	yes	yes	yes	yes	no	no
Patented No Drip	yes	yes	yes	yes	yes	yes
Anti-Algae	no	yes	no	no	no	no
<b>Energy Values</b>						
R-Value	1.78°F/BTU•hr•ft <sup>2</sup>	2.04°F/BTU•hr•ft <sup>2</sup>	3.57°F/BTU•hr•ft <sup>2</sup>	2.04°F/BTU•hr•ft <sup>2</sup>	2.04°F/BTU•hr•ft <sup>2</sup>	2.04°F/BTU•hr•ft <sup>2</sup>
U-Value	3.4 W/m <sup>2</sup> K (0.56 BTU/hr•ft <sup>2</sup> •°F)	2.5 W/m <sup>2</sup> K (0.49 BTU/hr•ft <sup>2</sup> •°F)	1.6 W/m <sup>2</sup> K (0.28 BTU/hr•ft <sup>2</sup> •°F)	2.5 W/m <sup>2</sup> K (0.49 BTU/hr•ft <sup>2</sup> •°F)	2.5 W/m <sup>2</sup> K (0.49 BTU/hr•ft <sup>2</sup> •°F)	2.5 W/m <sup>2</sup> K (0.49 BTU/hr•ft <sup>2</sup> •°F)
<b>New Product Warranty</b>						
Light Transmission Warranty (clear)	yes	yes	yes	yes	yes	yes
No Yellowing Warranty	yes	yes	yes	yes	yes	yes
Hail Warranty	yes	yes	yes	yes	yes	yes
<b>Geometry</b>						
Thickness	8 mm ( <sup>5</sup> / <sub>16</sub> " )	16 mm ( <sup>5</sup> / <sub>8</sub> " )	32 mm (1 <sup>1</sup> / <sub>4</sub> " )	16 mm ( <sup>5</sup> / <sub>8</sub> " )	16 mm ( <sup>5</sup> / <sub>8</sub> " )	16 mm ( <sup>5</sup> / <sub>8</sub> " )
Rib Spacing	16 mm ( <sup>5</sup> / <sub>8</sub> " )	32 mm (1 <sup>1</sup> / <sub>4</sub> " )	32 mm (1 <sup>1</sup> / <sub>4</sub> " )	64 mm (2 <sup>1</sup> / <sub>2</sub> " )	64 mm (2 <sup>1</sup> / <sub>2</sub> " )	64 mm (2 <sup>1</sup> / <sub>2</sub> " )
Width	1200 mm (47 <sup>1</sup> / <sub>4</sub> " )	1200 mm (47 <sup>1</sup> / <sub>4</sub> " )	1230 mm (48 <sup>7</sup> / <sub>16</sub> " )	1200 mm (47 <sup>1</sup> / <sub>4</sub> " )	1200 mm (47 <sup>1</sup> / <sub>4</sub> " )	1200 mm (47 <sup>1</sup> / <sub>4</sub> " )
Length	up to 10973 mm (36 ft)	up to 10973 mm (36 ft)	up to 7340 mm (24 ft)	up to 8550 mm (28 ft)	up to 8550 mm (28 ft)	up to 8550 mm (28 ft)
Approximate Area Weight	3.3 Kgm <sup>2</sup> (0.7 lb/ft <sup>2</sup> )	4.5 Kgm <sup>2</sup> (0.9 lb/ft <sup>2</sup> )	6.4 Kgm <sup>2</sup> (1.3 lbs/ft <sup>2</sup> )	4.9 Kgm <sup>2</sup> (1 lb/ft <sup>2</sup> )	4.9 Kgm <sup>2</sup> (1 lb/ft <sup>2</sup> )	4.9 Kgm <sup>2</sup> (1 lb/ft <sup>2</sup> )
Weighted Sound Reduction Index	23 dB	24 dB	24 dB	22 dB	22 dB	22 dB
Minimum Cold-Forming Radius	48"	96"	not recommended	not recommended	not recommended	not recommended
Coefficient of Heat Expansion (α)	0.09 mm/m °C (0.00005 in/in/°F)	0.09 mm/m °C (0.00005 in/in/°F)	0.09 mm/m °C (0.00005 in/in/°F)	0.09 mm/m °C (0.00005 in/in/°F)	0.09 mm/m °C (0.00005 in/in/°F)	0.09 mm/m °C (0.00005 in/in/°F)
Expansion Due to Heat and Moisture	6 mm/m ( <sup>1</sup> / <sub>16</sub> " /ft)	6 mm/m ( <sup>1</sup> / <sub>16</sub> " /ft)	6 mm/m ( <sup>3</sup> / <sub>32</sub> " /ft)	6 mm/m ( <sup>1</sup> / <sub>16</sub> " /ft)	6 mm/m ( <sup>1</sup> / <sub>16</sub> " /ft)	6 mm/m ( <sup>1</sup> / <sub>16</sub> " /ft)
Maximum Service Temperature	70°C (160°F)	70°C (160°F)	70°C (160°F)	70°C (160°F)	70°C (160°F)	70°C (160°F)
<b>Flammability</b>						
ASTM D-635 (Rate of Burn)	C2/CC2	C2/CC2	C2/CC2	C2/CC2	C2/CC2	C2/CC2
CAN/ULC-S102.2 (Flame Spread Classification)	< 150	< 150	< 150	< 150	< 150	< 150
DIN 4102 (Combustibility)	B2	B2	B2	B2	B2	B2
ASTM D-1929 (Self Ignition Temperature)	830°F	830°F	830°F	830°F	840°F	840°F
ASTM D-2843 (Smoke Density Rating)	8.1%	7.0%	8.5%	7.0%	2.0%	2.0%

Values are approximate.



**ACRYLITE® acrylic multi-skin sheet** continued

**ACRYLITE® acrylic wave profile**

	ACRYLITE® Heatstop		ACRYLITE® Resist	ACRYLITE® Heatstop
	16 mm ACRYLITE® Heatstop high impact acrylic double-skin sheet	32 mm ACRYLITE® Heatstop high impact acrylic quad-skin sheet	3 mm ACRYLITE® Resist high impact acrylic wave profile	3 mm ACRYLITE® Heatstop high impact acrylic wave profile
Light Transmittance (clear)	N/A	N/A	90%	N/A
Light Transmittance (Other Colors)	cool blue - 28%	pearl - 40%	white - 72%, grey - 45% bronze textured - 75% bronze prismatic - 55%	cool blue - 22% pearl - 48%
UV Blocking	yes	yes	yes	yes
Patented No Drip	yes	yes	no	no
Anti-Algae	no	no	no	no
<b>Energy Values</b>				
R-Value	2.04°F/BTU·hr·ft²	3.57°F/BTU·hr·ft²	0.98°F/BTU·hr·ft²	0.98°F/BTU·hr·ft²
U-Value	2.5 W/m²K (0.49 BTU/hr·ft²·°F)	1.6 W/m²K (0.28 BTU/hr·ft²·°F)	6.02 W/m²K (1.06 BTU·hr·ft²)	6.02 W/m²K (1.06 BTU·hr·ft²)
<b>New Product Warranty</b>				
Light Transmission Warranty (clear)	yes	yes	yes	yes
No Yellowing Warranty	yes	yes	yes	yes
Hail Warranty	yes	yes	yes	yes
<b>Geometry</b>				
Thickness	16 mm (5/8")	32 mm (1 1/4")	3 mm (1/8")	3 mm (1/8")
Rib Spacing	32 mm (1 1/4")	32 mm (1 1/4")	N/A	N/A
Width	1200 mm (47 3/4")	1230 mm (48 7/16")	1045 mm (41.1")	1045 mm (41.1")
Length	up to 5550 mm (18 ft)	up to 7340 mm (24 ft)	up to 4,900 mm (16 ft)	up to 4,900 mm (16 ft)
Approximate Area Weight	4.5 Kg/m² (0.9 lb/ft²)	6.4 Kg/m² (1.3 lb/ft²)	3.3 Kg/m² (0.7 lb/ft²)	3.3 Kg/m² (0.7 lb/ft²)
Weighted Sound Reduction Index	24 dB	24 dB	22 dB	22 dB
Minimum Cold-Forming Radius	96"	not recommended	48"	48"
Coefficient of Heat Expansion (α)	0.09 mm/m °C (0.00005 in/in/°F)	0.09 mm/m °C (0.00005 in/in/°F)	0.08 mm/m °C (0.00004 in/in/°F)	0.08 mm/m °C (0.00004 in/in/°F)
Expansion Due to Heat and Moisture	6 mm/m (1/16"/ft)	6 mm/m (1/16"/ft)	6 mm/m (1/16"/ft)	6 mm/m (1/16"/ft)
Maximum Service Temperature	70°C (160°F)	70°C (160°F)	70°C (160°F)	70°C (160°F)
<b>Flammability</b>				
ASTM D-635 (Rate of Burn)	C2/CC2	C2/CC2	C2/CC2	C2/CC2
CAN/ULC-S102.2 (Flame Spread Classification)	< 150	< 150	< 150	< 150
DIN 4102 (Combustibility)	B2	B2	B2	B2
ASTM D-1929 (Self Ignition Temperature)	830°F	830°F	750°F	750°F
ASTM D-2843 (Smoke Density Rating)	7.0%	8.5%	3.8%	3.8%

Values are approximate.





# ACRYLITE® Load Chart

lb/ft <sup>2</sup>	15	20	25	30	35	40	45	50	55	60
	<b>Support Spacing required (in inches)</b>									
<b>ACRYLITE® acrylic multi-skin sheet</b>										
8 mm ACRYLITE® Resist high impact acrylic double-skin sheet	106	86	74	67	63	60				
16 mm ACRYLITE® Resist high impact acrylic double-skin sheet	not required	157	122	110	102	98	94	86	82	78
32 mm ACRYLITE® Resist high impact acrylic quad-skin sheet	not required	not required	224	165	145	130	122	114	106	102
16 mm ACRYLITE® Alltop double-skin sheet	200	165	137	114	98	86	78	70	67	63
16 mm ACRYLITE® Alltop high impact acrylic double-skin sheet	200	165	137	114	98	86	78	70	67	63
16 mm ACRYLITE® Heatstop high impact acrylic double-skin sheet	not required	157	122	110	102	98	94	86	82	78
32 mm ACRYLITE® Heatstop high impact acrylic quad-skin sheet	not required	not required	224	165	145	130	122	114	106	102
<b>ACRYLITE® acrylic wave profile</b>										
3 mm ACRYLITE® Resist high impact acrylic wave profile	40	30	26	23	18	14				
3 mm ACRYLITE® Heatstop high impact acrylic wave profile	40	30	26	23	18	14				

Note: Maximum support spacing is measured in the direction parallel to the sheets ribs.

## Learn more

Let our experienced and knowledgeable team assist you in determining which ACRYLITE® product is right for your project. Learn more or request samples by calling 1-800-631-5384 or visiting [www.acrylitebuildingproducts.com](http://www.acrylitebuildingproducts.com)

Left: ACRYLITE® Resist acrylic high impact multi-skin sheets communicate a unique design vision when applied to Residence for a Briard. Architect: Sander Architects, LLC. Photo Credit: Sharon Risedorph.



**Learn more**

For more information and to request samples call us at 1-800-631-5384 or visit [www.acrylitebuildingproducts.com](http://www.acrylitebuildingproducts.com)

**Left:** Hourglass Winery. 3 mm ACRYLITE® Heatstop high impact acrylic wave profile in cool blue. Architect: Lundberg Design. Photo Credit: Ryan Hughs Photography.



ACRYLITE® is a registered trademark of Evonik Cyro LLC in the Americas. These same products are manufactured and marketed under the PLEXIGLAS® trade name on the European, Asian, African and Australian continents.

Certified to DIN EN ISO 9001 (Quality) and DIN EN ISO 14001 (Environment).

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