



SOLUTIONS FOR SIGNAGE

For over 25 years, CYRO Industries has been the leading acrylic resource for the sign industry. Our trademarked product, ACRYLITE® acrylic sheet offers outstanding optical clarity, superior impact strength, weather resistance and consistent performance.

ACRYLITE sheet comes in a number of grades and options to meet any need for interior and exterior signs.

What is ACRYLITE® SG Acrylic Sheet and Why Should I Use It?

ACRYLITE SG sheet is a modified acrylic sheet product developed specifically to meet the unique needs of the sign industry. What sets it apart from standard acrylic is its impact strength, which translates into reduced breakage during production, shipping, and installation.

ACRYLITE SG sheet is a universal product that works perfectly for any sign application, from channel letters to formed letters and shapes to back-painted signs. In addition to superior strength, it offers easy fabrication, excellent weatherability, and remarkable color consistency.

When you add it all up, ACRYLITE SG sheet is the most versatile sign material on the market, making it the clear choice over other plastics, such as conventional acrylic or polycarbonate.

THE FLEXIBLE CHOICE FOR CHANNEL LETTERS

For channel letter manufacturing, the biggest cost component is labor, and that's why ACRYLITE SG sheet is the ideal choice for fabricators. It's a "forgiving" product that's easy to handle, routes much faster than other materials, resists chipping and melting, and offers superior impact resistance to prevent breakage.

Cementing set-up time is quicker, and it can be easily cemented to itself and to other acrylics, as well as to trim cap, creating strong bonds for channel letters.

"ACRYLITE SG sheet saves us about 30 percent in fabrication costs," reports Brian Giles of CAL SIGN Wholesale, Inc. (Modesto, CA), a wholesale sign manufacturer who produces many recognized national sign programs. "We have virtually no breakage with it whatsoever, even when cutting difficult letters, and we have minimal scrap."

Can ACRYLITE SG Sheet's Cost Beat Imported Cast Sheet?

At first glance import sheet pricing looks appealing, however, lowering your total cost of use will save more money. ACRYLITE SG sheet significantly increases yields through reduced breakage and quicker fabrication cycles, whereas standard acrylic can chip, forcing manufacturers to make replacement parts, raising material and labor costs.

Color and thickness consistency are two quality factors that can affect your overall costs. Cast sheet batches are small—usually 10-20 sheets—and can produce a wide range of thickness variations within a batch and even a single sheet. And since batches need to be color matched, there is even greater opportunity for color consistency errors.



ACRYLITE SG sheet is continuously manufactured in runs of hundreds or thousands of sheets at a time, adhering to tight thickness tolerances during production, ensuring consistent results during fabrication.

Signs Last Longer, Even Outdoors

Sign manufacturers need to ensure that signs withstand the adverse effects of the sun, and a truly superior sign is one that lasts a long time. Signs made with ACRYLITE SG sheet are built to last, and outdoor channel letters retain their color and impact strength for many years.

Even UV-protected polycarbonate sheet will show signs of weathering long before ACRYLITE SG sheet.

ACRYLITE SG SHEET VS. POLYCARBONATE

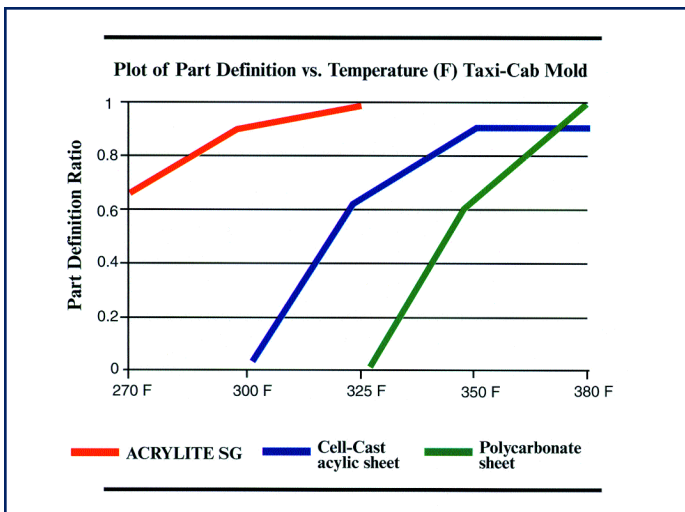
Why is ACRYLITE SG Sheet More Cost-Effective Than Polycarbonate?

Pound for pound, ACRYLITE SG sheet saves manufacturers up to 25 percent over polycarbonate. In addition to material cost-savings, ACRYLITE SG sheet saves on labor and energy expenses because it fabricates more quickly and easily.

Why pay more for polycarbonate's excessive strength? ACRYLITE SG sheet provides the strength needed to withstand harsh weather conditions. And its superior weatherability means it will look good longer than a sign made with polycarbonate sheet.

What are the Fabrication Advantages of ACRYLITE SG Sheet?

ACRYLITE SG sheet was designed to be more versatile and easier to fabricate than polycarbonate. While requiring the same tooling used for standard acrylic, it processes over a broader range of feed rates and tool speeds to accelerate production and quicken cycle times.



This chart demonstrates ACRYLITE SG sheet's lower thermoforming temperatures.



Signs thermoformed with ACRYLITE SG sheet have superior light transmission, clarity and mold definition.

What are the Thermoforming Advantages of ACRYLITE SG Sheet?

ACRYLITE SG sheet thermoforms at lower temperatures than polycarbonate, cell cast and standard acrylic—even as low as 270°F—resulting in quicker cycle times and lower energy costs. It also does not need to be pre-dried for thermoforming, unlike polycarbonate. The graph on the lower left portion of this page illustrates ACRYLITE SG sheet's ability to achieve excellent part definitions at lower temperatures compared to polycarbonate and standard acrylic. It has consistently low shrinkage characteristics (less than three percent), and there is no breakage during mold release, so fabricators are assured the same results every single time. ACRYLITE SG sheet can be heated with infrared heaters, circulating air ovens, and other conventional heating methods.

Why is ACRYLITE SG Sheet Better for Outdoor Applications?

Weatherability is another reason why ACRYLITE SG sheet outperforms polycarbonate. Polycarbonate will yellow and become hazy after only a few years of UV exposure, and it will lose much of its impact strength.

Acrylic withstands the effects of weathering much better than polycarbonate, and ACRYLITE SG sheet has been specially formulated to combat the elements without losing its color or impact strength for many years. In fact, even polycarbonate that has been pre-treated with UV-protection will show signs of weathering much sooner than ACRYLITE SG sheet.

ABRASION RESISTANT ACRYLITE® AR ACRYLIC SHEET FOR INTERIOR SIGNS

How Do I Choose the Best Product for Indoor Sign Applications?

You need to consider three qualities in choosing the right material for interior signs: safety, performance, and cost. Glass offers performance because it stands up to public environments, but it's heavy, difficult to fabricate and handle, and time-consuming to replace. Glass can also shatter and compromise safety, making it a risky choice for public areas, especially with children. Tempered glass will improve safety, however, it's more expensive, cannot be cut to size, and has the same drawbacks associated with glass.

Another choice is standard acrylic, which is half the weight of glass, easy to fabricate, and shatter resistant. But standard acrylic can scratch and often doesn't have the chemical resistance necessary for cleaning and maintenance. That's why abrasion resistant ACRYLITE AR sheet is the perfect choice for interior signs. Signs made with ACRYLITE AR sheet will last far longer and retain their superior optical clarity.

What Benefits Make ACRYLITE AR Sheet a Better Choice for Signs?

ACRYLITE AR sheet combines acrylic's easy fabrication and handling, with a proprietary 3M 906 abrasion resistant coating. This makes it many times more resistant than standard acrylic to scratching and marring from frequent public contact. Manufacturers have the option of using a one-sided abrasion resistant sheet, while the uncoated side is ideal for silk-screening.

Because of its chemical resistance, ACRYLITE AR sheet can be cleaned with a number of standard household glass cleaners while maintaining its superior optical clarity. Additional sheet options include ultraviolet light filtering and a glare reducing surface texture.

Why Is ACRYLITE AR Sheet the Cost-Effective Choice?

When you look at the total cost of use, ACRYLITE AR sheet offers unbeatable savings. While the material cost of ACRYLITE AR sheet is higher than standard acrylic or (non) tempered glass, the difference is negligible. In fact, for most interior signs, it's only a few dollars. ACRYLITE AR sheet stands up much longer than standard acrylic and will not shatter like glass, so replacement costs are lower. And while glass is difficult to fabricate, ACRYLITE AR sheet can be easily cut to size, so ordering is fast and simple.

With top quality performance, increased safety, and easy installation and cleaning, the savings quickly add up, making ACRYLITE AR sheet the material of choice for mall directories, back-lit signs, or any other interior sign.



ACRYLITE AR sheet is the ideal choice for this indoor mall directory.



ACRYLITE AR sheet is used for this directory at the busy Hartsfield Airport in Atlanta.

EXTRA THICK ACRYLITE® FF ACRYLIC SHEET FOR PUSH-THRU LETTERS

What Material Characteristics Do You Need for Push-Thru Letters?

For push- or press-thru lettering, you need a product that routs easily and quickly, provides superior optical clarity, and gives you consistent results. That's why fabricators rely on economical, continuously-manufactured Extra Thick ACRYLITE® FF acrylic sheet. It's the ideal choice for push-thru letters because of easy fabrication and blemish-free appearance. And it gives you the flexibility of run-to-size orders to match your needs.

ACRYLITE sheet is preferred by Baltimore-based Triangle Sign & Service for push-thru letters. "Other plastics will melt or bind around the bit during fabrication, but not ACRYLITE sheet," says Albert Nitsch of Triangle's routing department. "ACRYLITE sheet is beautifully clear, which is important since we use high output lamps with a white background. We can count on the material without worrying about imperfections, and that comes in very handy," he adds.

Don't You Need a Cast Product for Thick Push-Thru Letters?

Some people question whether a continuously-manufactured product can be machined into push-thru letters as efficiently as cast sheet. But so long as you have proper tooling, Extra Thick ACRYLITE FF sheet will fabricate smoothly and quickly. For example, Triangle Sign uses a single-flute Onsrud Cutter bit for fabricating, which gives letters a polished look.

Some fabricators might still be tempted by cheaper, imported cast sheet. But CYRO can run Extra Thick ACRYLITE FF sheet to size to accommodate bigger letters and different shapes, so you end up with less scrap and higher yields. Plus, ACRYLITE FF sheet comes with a limited

ten-year warranty guaranteeing no change in light transmission in excess of three percent. Why take a chance? If you're limited by size restrictions and not sure about the quality of imported sheet, how much do you really think you're saving?

Can I Use ACRYLITE SG Sheet for Sign Faces?

Most push-thru letter operations use aluminum sheet for sign faces, however, impact-modified ACRYLITE SG sheet is an excellent choice if you need a translucent plastic. "For sign jobs requiring extra illumination, we can use 1/8" or 3/16" ACRYLITE SG sheet for the face, and Extra Thick ACRYLITE FF sheet for push-thru letters," Nitsch says.



Fabricators can count on ACRYLITE sheet for superior clarity and defect-free appearance.



Triangle Sign & Service uses a single-flute Onsrud Cutter bit for fabricating, which gives letters a polished look.

ACRYLITE SG sheet is rigid and tough, and it resists chipping and melting, making it an excellent alternative to metal faces. And its superior weatherability gives you a durable sign that will last a long time. It's one more reason why ACRYLITE sheet products offer you the best options for any sign application.

**For free samples, fabrication manuals, or technical support, call
CYRO Industries at 800-631-5384 or visit www.cyro.com.**



Find out why ACRYLITE sheet
is the perfect choice for your sign.

