



CYRO Canada Inc.

6285 Northam Drive, Suite 100, Mississauga, Ontario L4V 1X5  
Head Office Telephone (905) 677-1388 Fax (905) 677-7805  
Head Office Toll Free 1-800-387-3464 (ONTARIO & QUEBEC) 1-800-268-4743 (CANADA)  
Order Desk (905) 677-1410 (LOCAL) 1-800-387-3465 (ONTARIO & QUEBEC)  
1-800-268-4837 (CANADA) 1-800-461-7398 (U.S.A.)  
E-Mail cyro-canada@cyro.com

## ACRYLIC OR POLYCARBONATE

### WHEN AND WHY

CYRO is an industry leading manufacturer of **BOTH** double-skinned acrylic sheet and double-skinned polycarbonate sheet. As such, we are often asked for a recommendation on which product is best for a specific glazing application.

These two products, of course, offer many similar benefits: energy efficiency, installation ease, diffused light, strength, CC2 fire ratings, high load capabilities, etc.... but when making a decision on using one over the other, you must more importantly consider the differences.

Although similar in appearance when new, ACRYLITE® SDP® Double-Skinned Acrylic sheet and CYROLON® SDP® Double-Skinned Polycarbonate sheet actually perform quite differently.

Acrylic weathers extremely well due to its inherent stability. Acrylic affords a high initial light transmission level (as high as 91%) and maintains its high light and high gloss sheen year after year without discoloration. Acrylic provides superior optical clarity and will not yellow. Like glass, acrylic is susceptible to impact damage. However, unlike glass, acrylic does not shatter and is considered a safety glazing material suitable for overhead use.

Polycarbonate does not weather as well. Polycarbonate has a lower initial light transmission level (up to 80%) and regrettably these light levels diminish year to year as the material ages. What polycarbonate does provide is extremely good impact resistance. CYROLON® SDP® Double-Skinned Polycarbonate Sheet is virtually unbreakable when new. The nature of polycarbonate can also make it very forgiving when it comes to handling and installation. But again, polycarbonate will embrittle and become breakable with age, eventually losing the one advantage it has over the longer life acrylic sheet.

If the sheet is to be used in a high vandal area where higher impact resistance is needed and improved security and property protection are required, we recommend taking a serious look at CYROLON® SDP® Polycarbonate Double-Skinned Sheet. Polycarbonate does not have the longevity of acrylic so replacement will be required to maintain impact strength. But if the threat is real, the peace of mind is worth the addition investment and replacement costs.

In general, acrylic is the product of choice for most residential, light commercial, and greenhouse applications as it is not adversely effected from the damaging rays of the sun. And as it also blocks UV transmission it projects from sunburn. So if long term performance and pleasing aesthetics are the criteria for selection, then the non-yellowing characteristics make it the right choice for greenhouses, patio covers, pool enclosures, porch enclosures, sunrooms, carports, pool enclosures and skylights.

*Note: ACRYLITE SDP, ACRYLITE SDP NO DRIP and CYROLON SDP are registered trademarks or trademarks of CYRO Industries, used under licence.*