1065 East 26 Street
Hialeah, Florida 33013
305-691-5961 or 1 (800) 833 2888
Email: sales@krinklglas.com or fax 305-691-0455
Website: krinklglas.com

HOW "KRINKLGLAS®" SAVES ENERGY DUE TO ITS LOW THERMAL CONDUCTIVITY and HEAT INSULATION

For the technical buffs .....
Not only is Krinklglas® cheaper than stain glass, its also better ... here's why.

Thermal conductivity is defined as the time rate of transfer of heat by conduction, through the thickness, across unit area for unit difference of temperature, and has a "k" factor or value for each material.

The "k" factor is given in two (2) units:
a) BTU (British thermal units) per hour per square foot for a thickness of one inch and a difference of temperature of I ° Fahrenheit, abbreviated BTU/(hr)(ft2X"F\inch)
b) Calories per second per square centimeter for a thickness of one centimeter and a difference of temperature of 1° Centigrade or Celsius, abbreviated cal\(scc)(cm2) <"C\cm)

In order to show the low values of heat conductivity for KRINKLGLAS®, which makes it the perfect choice for ENERGY SAVING INSTALLATION, we quote the following technical publication: from *Modern Plastics Encyclopedia*. 1962 Edition, page 41 and 42:

"The terminal conductivities of pure resins, like their specific heats are grouped in a narrow band, though the range of values/or all material are wide. At the low end of the scale among plastics are the styrene polymers with k*s of about 0.QQQ2 metric unit, while high-density polyethylene leads the family with O.QQ12 unit. These values place plastics AT THE BOTTOM OF THE THERMAL CONDUCTIVITY SPECTRUM AMONG SOLID MATERIALS. The only solids with smaller k values are those containing substantial fractions of "dead" air or other gases, such as cork, felt, balsa wood, mineral wool, and of course the foamed plastics.

THUS PLASTICS ARE EXCELLENT HEAT INSULATORS.

For comparison, the k values for white pine, concrete, WINDOW GLASS, marble, steel, aluminum, and copper at room temperature are, in that order: ».»M3&. O.M22. C.M12 to O.M25. O.MMto tt.W7tt. 0.104, 0.487, and ».»222 cal/sf. cm/sec/(°C./cm.)."

The most recent value of thermal conductivity for acrylic-polyester fiberglass reinforced panels

run from 1.7 to 8.7 x 10-4 cal/»q.cm/sec/(°C/cm) as per data given in the *Modern Plastics Encyclopedia*, 1975-7fi Edition, page 618, for the Laminates Chart.

Comparing these ranges of values for acrylic-polyester fiberglass reinforced panels with the range of values for window glass, the results are obvious:

Acrylic-polyester fiberglass reinforced laminates 1.7 to 8.7 x 10"* units, Window glass 12.0 to 25.0 x W' units, and proves that

KRINKLGLAS® acrylic-polyester fiberglass reinforced panels ***INSULATE FROM HEAT AT LEAST 3 TIMES MORE THAN GLASS AND AS MUCH AS 7 TIMES, WHICH MAKES AN AVERAGE OF 5 TIMES.***

These facts can be corroborated by other independent sources; to wit, *The Handbook of Chemistry and Physics*, S5th Edition, page E5, gives the following value for the thermal conductivity of glass as a building material: 5 to 6 BTU/ (hr)(sq. ft.) (°F/inch). *The Handbook of Reinforced Plastics of the Society of the Plastics Industry, Inc.* by Samuel S. Oleesky and J. Gilbert Mohr, 1964 Edition, page 459, gives the following value for the thermal conductivity of glass- polyester laminates: 0.97 BTU/(hr)(sq. ft.) (°F/inch).

Which leaves no doubt as to the INSULATING VALUE OF KRINKLGLAS®, WHICH CAN BE CONSIDERED TO BE 5 TIMES BETTER THAN GLASS.

Lab Technical Data (based on 1/8" thickness)

INSULATION VALUE - KRINKLGLAS® has a coefficient of heat transmission (U-factor) of 1.00 BTU/hr/sq. ft./in... roughly equivalent to glass.

SHATTERPROOF - complies with Break Safe Characteristics of ANS Z97.1

TENSILE STRENGTH (ASTM D-638) - 8,740

FLEXURAL STRENGTH (ASTM D-790) - 17,800

FLEXURAL MODULUS (ASTM D-790) - 721,000

COMPRESSIVE STRENGTH (ASTM D-695) - 18,600

STATIC LOAD (applied pressure 20"/min) - 480 lbs/sf

FLAMMABILITY

GENERAL (D-635) - 0.80 in/min SPECIAL (D-635) - self-extinguishing

DIMENSIONAL STABILITY - -40° +266° F

HARDNESS-BARCOL - 40-45

HERMAL EXPANSION - 1.1 X 10 - 5 F

WATER ABSORPTION - 0.08%

EIGHTS - 1/8" - 0.9 lbs/sf; 3/16" - 1.35 lbs/sf; 1/4" - 1.85 lbs/sf

EXPLANATION OF COLORS/PATTERNS

CLEAR-panels have no coloring.
SINGLE COLOR- panels have one color.
MULTICOLOR- panels have various colors blended together to form a unique multi-hued appearance.

MULTICOLOR	BLENDED COLORS
No. 1	Blue, Green, Orange, Purple, Violet, Olive
No. 2	Blue, Green, Orange, Purple, Violet, Olive, Amber, Red
No. 3	Blue, Green, Orange, Purple, Violet, Olive, Amber, Red
No. 4	Green, Orange, Olive, Amber
No. 5	Blue, Green, Purple, Violet
No. 6	Blue, Orange, Purple, Violet, Amber, Red
No. 7	Blue, Purple, Rose Mauve, Green
No. 8	Blue, Rose Mauve, Green
No. 9	Orange, Olive, Amber, Yellow
No. 10	Light Gray, Rose Mauve
No. 11	Blue, Red
No. 12	Orange, Purple, Blue, Green
No. 13A	Blue, Green, Purple, Violet, Yellow
No. 14	Blue, Yellow, Green, Gold
No. 15	Orange, Red, Yellow, Brown
No. 16	Yellow, Orange, Red, Green, White
No. 17	Blue, Violet, Olive, Green, Orange
No. 18	Blue, Olive, Green
No. 19	Orange, Red, Purple, Violet, Blue
No. 20	Blue, Olive, Green, Orange, Yellow
No. 21	Gold, Blue, Red, Orange, Yellow

PATTERNS DESIGNS- patterns or designs available in Clear, Single or Multicolor.
CATHEDRAL LINES- straight diagonal black lines of varying thickness at angles.
CONTEMPORARY LINES- swirled black lines in a random pattern.
DIAMOND LINES- 5”x8” or 2”x4” (mini) diamond shapes.
DEBOSSED- diamond, circle, Persian pattern debossed in panel.
PAN-L-BLOK®- glass block design debossed in panel; made in 6” and 8” block sizes.
VANDAL-PROOF- metal inlay added for improved strength, security, and deterrence.
STRIATED- special lineally textured surfaces.
KRINKL® ICE- extra thick, deep textured surfaces.
MOSAICS, MULTI-WEAVE- special black line patterns with various colors as shown in color chart.

HOW TO ORDER KRINKLGLAS®

1) Determine the amount and the size (width and length) of paneling required.
2) Add cost for any special features which may apply. (Pricing for debossings, lettering, artwork, color sketches, special patterns, etc. ask sales agent).

3) Panels are trimmed to standard size.
4) Orders are crated for shipment unless picked up at the plant uncrated. Add packing and handling charges as described on **OTHER PRICES** below.

Shipping Crate:	$45 Each
Pallets:	$160 Each

Maximum Panel area per crate - for both 4' & 5' Crates
1/8" Panels - 256 sq. ft.
3/16" Panels - 160 sq. ft.
1/4" Panels - 128 sq. ft.

1) All prices are F.O.B. Hialeah, Florida.
2) Carefully inspect shipping crates upon delivery, and immediately note and report any damage to the trucking company. Check all panels upon receipt and before cutting. **Note: Panels or pieces cut by the customer will not be accepted for credit or return.**
3) In the event an invoice remains unpaid and is placed in an attorney or collection agency, the buyer agrees to pay all costs of collection, which include attorneys or other collection agency fees.
4) Krinklglas® remains the property of Dimensional Plastics Corporation until fully paid for: Prices are subject to change at any time.