

## GENERAL PROPERTIES

InDURO™ is a highly engineered continuous cast acrylic sheet built for longevity to withstand in the toughest of elements within the transportation and mobility market.

### AVAILABILITY

InDURO™ can be supplied in widths from 24" to 108" (60 to 274 cm). Sheet thicknesses range from 0.160" up to 0.450" (4 to 11.4 mm), but are standard in 0.275" caliper and can be cut to fractional sizes to comply with close tolerances.

### DESIGN FREEDOM

With larger sizes, comes better uniformity and superior properties. InDURO™ opens new horizons for product designs never possible with conventional cell-cast acrylic sheet. InDURO™ gives designers freedom in colors, too and is supplied in a variety of standard solid colors. By request, the Aristech Surfaces LLC color laboratory can develop other colors that may be required.

### FORMABILITY

InDURO™ can be cold formed at room temperatures to yield generous curved surfaces. If unusual shapes or smaller curvatures than those possible with cold forming are desired, InDURO™ can be thermoformed. This involves heating the material to approximately 380° F (195° C) and forming the desired shape with vacuum or air pressure.

### FABRICATION

Unlike glass and other materials, InDURO™ can easily be sawed, drilled, routed, filed, cemented, and machined. It behaves similar to hard- wood or brass.

### RESISTANCE TO BREAKAGE

InDURO™ has 10 to 17 times greater breakage (impact) resistance than glass in equivalent thicknesses. InDURO™ does not lose its outstanding breakage resistance because of degradation from weathering.

### SAFETY

The resistance to breakage and lighter weight of InDURO™ make it a safer material to handle and work with. If breakage should occur, the material does not shatter and splinter. Usually the break is local (a hole) or a clean single break. The broken edges are dull compared to glass fragments.

### WEATHER RESISTANCE

InDURO™ has outstanding weathering resistance. Even in areas such as Florida and Arizona, acrylics are virtually unaffected after 15 or more years exposure. Acrylics have been used successfully for more than 40 years in outdoor sign applications.

### RESISTANCE TO TEMPERATURE EXTREMES

The continuous use temperature for InDURO™ is up to 180° F (82° C). Higher temperatures can be tolerated for short periods of time without permanent damage occurring. At extremely low temperatures (-30° F) (-34.4° C), InDURO™ remains very serviceable with only a slight reduction in breakage resistance occurring.



## INSULATING VALUES

InDURO™ is a better insulator than glass. Its heat transfer characteristics are similar to those of rubber. The coefficient of thermal conductivity (K Factor) or ability to conduct heat is 1.4 compared to 5 to 6 for ordinary glass. This means with zero wind velocity on both sides of the

windowpane, ordinary glass conducts heat more than 4 times as fast as InDURO™. The overall coefficient of heat transmission (U Factor) is 1.04 compared to 1.25 for glass. At these conditions, InDURO™ Sheet is still approximately 20% better insulator than ordinary glass.

**Note: for cautions and information on exposure to any Aristech Surfaces' product, please see the applicable material safety data sheet.**

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