## Kydex ${ }^{\circledR}$

## Acrylic-Polyvinyl Chloride

## Description and Overview

Kydex $®$ is a durable, thermoformable sheet that combines properties of both acrylic and PVC. Kydex® is easy to fabricate and vacuum form using conventional methods and equipment. Kydex® also features excellent resistance to breakage, chemicals and fire, meeting many aerospace and building code specifications.

Due to superior formability, Kydex® is an ideal choice for equipment housings as well as aircraft and transportation interiors.

## Applications and Uses

Kydex ${ }^{\circledR}$ applications range from medical equipment, transit, automotive, building and aviation interiors, to furniture and fixtures. Kydex® can be used as protection from electrical shock and has equipment housing applications for tools including electrical welders that require durability and high impact strength. Kydex ${ }^{\circledR}$ is also used in the orthotic industry for braces.

Due to the material's formability and scratch resistance, Kydex ${ }^{\circledR}$ is often used to manufacture thermoformed gun holsters and knife sheaths.

- Aircraft interiors
- Mass-transit vehicle interior components
- Equipment housings
- Medical products
- Gun holster and knife sheaths
- Flat, laminated panels
- Kick plates and push plates
- Exhibits and kiosks


Kydex® is available in a variety of colors \& patterns.
Full Sheet: 48"x96" (.028" through 0.25" thick)

## Properties and Specifications

| Property | Kydex® |
| :--- | ---: |
| Specific Gravity | 1.35 |
| Tensile Strength (psi) | 6,100 |
| Elongation at Break | $110 \%$ |
| Modulus of Elasticity (psi) | 360,000 |
| Izod Impact, Notched | 15 ft -lbs/in. |
| Rockwell Hardness | R94 |
| Heat Deflection @ 265psi | 168 F |
| Flammability | UL94, V-0, 5V |
| FAA Compliance | Pass |
| Forming Temperature | $290^{\circ}-325^{\circ} \mathrm{F}$ |
| Affixable Properties | Chem / Mech |

