# **KYDEX®** Thermoplastic Sheet

High impact, thermoplastic sheet that is tough, durable, and easy to form



KYDEX<sup>®</sup> Thermoplastic Sheet is an excellent choice for applications where appearance, toughness, or complex thermoforming is required. It is used for thermoformed equipment housings, airplane, bus and train interior parts, kiosks, medical devices, and POP displays.

# **KYDEX®** Thermoplastic Sheet Material Options

**Bonding KYDEX® Thermoplastics** – Use Plexus® MA300, a fast-setting methacyrlate adhesive, to create stronger bonds than the KYDEX® Sheet itself.

**KYDEX**<sup>®</sup> **100** – Rigid, tough, durable, plastic alloy sheet available in a wide range of standard and custom colors, textures, and sheet sizes. It is Underwriters Laboratories<sup>®</sup> Inc. recognized for UL Std 94 V-0, 5V and has 961 J/m (18 ft-lbs/in) Notched Izod impact resistance.

**KYDEX**<sup>®</sup> **T** – High impact fire-rated sheet that is less hygroscopic and usually does not require pre-drying. Offers more uniform forming with less wall thinning. Greater resistance to a broad range of corrosive chemicals and cleaning solutions.

**KYDEX**<sup>®</sup> **V** – Cost-competitive, recycled-grade utility sheet offered only in the color black. Due to some degree of color variability, it is especially well-suited for hidden or painted parts.

**KYDEX® T Sheet for O&P** – Used by fabricators in the orthotics industry for neck braces, body jackets and upper extremity orthoses. KYDEX® Sheet provides rigidity, excellent formability, and mar-resistance.

**KYDEX**<sup>®</sup> **V** Sheet for O&P – Recycled grade also suited for use by fabricators in the orthotics industry. Offered in a standard, smaller size of 32 in x 48 in.

# **TYPICAL PROPERTIES OF KYDEX® THERMOPLASTIC SHEET**

## KYDEX® Thermoplastic Sheet is widely used for:

- Kiosks, exhibits, and display bases
- Counters, workstations, and kickplatesFurniture components, shelving,
- and cabinetryMedical device and closures
- Flat laminated panels of all types
- Thermoformed equipment housings
- Aviation and mass transit interiors
- Membrane pressed components

### Performance characteristics:

- Easy to thermoform deep-draw parts
- Maintains excellent part definition and crisp detail
- High impact resistance to breakage
- Good strength and stiffness
- Easy machining and fabricating using conventional methods and equipment
- Consistent color throughout the KYDEX<sup>®</sup> material helps hide scratches and wear

### Available in:



|   | UNITS                     | ASTM TEST | KYDEX <sup>®</sup> 100 | KYDEX <sup>®</sup> T | KYDEX® V |
|---|---------------------------|-----------|------------------------|----------------------|----------|
| Tensile strength                              | psi                       | D638      | 6,100                  | 6,100                | 6,100    |
| Flexural modulus                              | psi                       | D790      | 335,000                | 360,000              | 335,000  |
| Izod impact (notched)                         | ft-lbs/in of notch        | D256      | 18.0                   | 15.0                 | 80       |
| Heat deflection temperature @ 264 psi         | °F                        | D648      | 173                    | 168                  | 165      |
| Maximum continuous service temperature in air | °F                        |           | -                      | -                    | -        |
| Water absorption (immersion 24 hours)         | %                         | D570      | 0.05-0.08              | 0.08                 | -        |
| Coefficient of linear thermal expansion       | in/in/°Fx10 <sup>-5</sup> | D696      | 4.2                    | 3.8                  | -        |

Values may vary according to brand name. Please ask your Curbell Plastics representative for more specific information about an individual brand.

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