## Mass Transit **PRODUCT CATALOGUE**

# SEKISUI | KYDEX

## MASS TRANSIT PRODUCT CATALOGUE

KYDEX<sup>®</sup> Thermoplastics are globally recognized as the leader in high-performance specialty polymers for mass transit interiors.

The fully-compliant portfolio meets all of the stringent requirements of industry certifications for passenger safety. With a refined degree of integral finish, colour, and design, KYDEX® Thermoplastics enhance the passenger experience.



### Why SEKISUI KYDEX?

We are more than a raw material supplier, we are a solution provider. As your collaborative partner we put innovation at the forefront by guiding you through your project from beginning to end. The experts in our Innovation Centers, designLab® and appLab<sup>™</sup>, are available to help you identify the best solutions for your applications.

### Sustainability Initiatives .

SEKISUI KYDEX focuses on making the planet better for future generations by ensuring the lifecycle of KYDEX® Thermoplastics is a sustainable one.



## CUSTOMIZE YOUR JOURNEY

02	FEATURED RAIL	07	SURFACE GRIP™
03	FEATURED BUS	80	ANTIMICROBIAL TECHNOLOGY
04	TEXTURES	09	INNOVATION CENTERS
05	INFUSED IMAGING™	10	MASS TRANSIT PRODUCT LIBRARY
06	COLLABORATION with N+P		

#### ED AAn In House Zero Waste Recycling: to Landfill UltraPoly

Waste converted to energy powers

ISO 14001. 2015 our campuses



Greenhouse Gas Reduction Initiative

### CONNECT WITH US

(in)

CUSTOMER COLLABORATION

SEKISUI KYDEX

kydex.com

info@kydex.com

1.800.325.3133

appLab™ FOR TECH SUPPORT

kydex.com/app-lab

- appLab@kydex.com
- 1.800.682.8758

designLab<sup>®</sup>

FOR CREATIVE SUPPORT

kydex.com/design-Lab

designLab@kydex.com

KYDEX<sup>®</sup> Thermoplastics offer ample design flexibility, while meeting the most stringent fire, smoke, heat release, and toxicity requirements, providing a fully-compliant portfolio to meet all of your rail application needs.

### KYDEX<sup>®</sup> 2200LT NFPA 130 & SMP 800 & BSS7239 Compliant

A light weight and durable alternative to FRP, offering unlimited design possibilities for shape, color, and embossed features including texture. Capped with a clear overlay for cleanability and graffiti resistance.

### Features & Benefits

- Customizable / Design Flexibility
- Sustainable (Lightweight / Saving Energy / Recyclable)
- Excellent Chemical, Graffiti, and Stain Resistance
- Durable





KYDEX<sup>®</sup> 2210LT EN 45545-2 R1 & R6 Compliant

Proprietary, high performance thermoplastic sheet specifically engineered to be compliant with EN (European norm) 45545-2 R1 and R6 Hazard Level 2.

Long-term durability and weight savings over FRP, aluminum, or steel make KYDEX<sup>®</sup> 2210LT a desirable and more sustainable choice for customers who expect rail cars to last 20 years or more.

### Features & Benefits

- Customizable / Design Flexibility
- Sustainable (Lightweight / Saving Energy)
- Excellent Chemical, Graffiti, and Stain Resistance
- Durable



### FEATURED RAIL PRODUCTS

appLab designLab FSTLab

## FEATURED BUS PRODUCTS

KYDEX<sup>®</sup> and ALLEN<sup>®</sup> Thermoplastics are designed to be aesthetically pleasing and meet the stringent requirements of external and internal bus applications.

ALLEN<sup>®</sup> ALEXTRA

FMVSS 302 & ASTM E 162 and 662 Compliant

Industry-leading durability for extreme weather conditions maintaining high impact properties with temperatures as low as -60°F. Raises the standard for high-gloss aesthetics.

### **Features & Benefits**

- For Exterior Applications
- Very High Gloss
- Customizable / Design Flexibility
- Sustainable (Recycling Buy-back Programs)
- Durable





KYDEX<sup>®</sup> 6200 FMVSS 302 & Docket 90 Compliant

A light weight and durable alternative to FRP offering unlimited design possibilities for shape, color, and embossed features including texture.

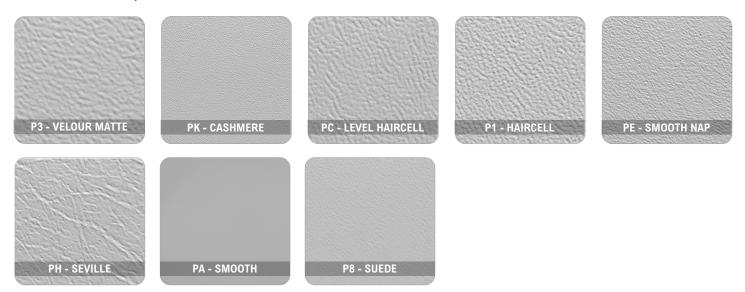
#### **Features & Benefits**

- Customizable / Design Flexibility
- Excellent Chemical, Graffiti, and Stain Resistance
- Sustainable (Lightweight / Saving Energy)
- Forms to Deep Draws



Strategic use of textures for different applications throughout the rail car interior can elevate passenger mood and experience. KYDEX<sup>®</sup> Thermoplastics are available in multiple variations of texture to promote innovative tactile design.

### **KYDEX®** Thermoplastics Textures



KYDEX® 2200 and 2210 are only available in P3 and PC textures.

### ALLEN® Thermoplastics Textures





TEXTURES

## InfusedImaging

Infused Imaging<sup>™</sup> puts colour and imagery *into* thermoplastic material.

## Not on it.

Infused Imaging<sup>™</sup> is a proprietary process that embeds imagery into thermoplastic material.

Durability is enhanced because it does not chip, fade, or delaminate the way capped and traditionally printed images can.







### LEARN MORE

		NO DELAMINATION	NO START-UP/ INVENTORY COSTS	LOW MINIMUM REQUIREMENTS	SINGLE STEP	NO MATERIAL WASTE	NO TOXIC CHEMICALS
COMPETITOR PROCESS	CAPPED [in-line]	_	_	_	_	_	
	CAPPED [press lamination]	_	_	_	_	_	•
	HYDROGRAPHICS	-	-	-	_	_	_
	SILK SCREEN / DIGITAL PRINTING	-		•	_		_
IN	IFUSED IMAGING™	•	-			-	-

\_\_\_ 5-7 microns below the surface





SUBSTRATE

# 

## N≁P COLLABORATION

## Pushing the boundaries of rail interiors.

At SEKISUI KYDEX, collaboration is instilled in our DNA. We believe in building productive relationships with designers, manufacturers, and end users. Nowhere is this more apparent than in our recent collaboration with N + P Innovation Design.

Given the emphasis on circular design and preference for sustainable materials within the rail industry, SEKISUI KYDEX and N + P began collaborating to bring forward thinking and flexible design solutions to rolling stock. Together, N + P and KYDEX explored how some of the strategic design agency's concepts could be executed in more durable, lighter weight thermoplastics that can be fully recycled at the end of their life cycle.

The SEKISUI KYDEX team brought N + P's designs to life using KYDEX<sup>®</sup> Thermoplastics with Infused Imaging<sup>™</sup> Technology to create a new level of passenger experience in rail.



VISIT THE N+P WEBSITE







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## SURFACEGRip<sup>™</sup> KYDEX® T+SG



Developed in the appLab<sup>™</sup>, the new KYDEX<sup>®</sup> surfaceGrip<sup>™</sup> (SG) product line is an anti-slip, low gloss material for mass transit interiors.

Available with custom colour and Infused Imaging<sup>™</sup> technology, KYDEX<sup>®</sup> surfaceGrip<sup>™</sup> opens the door to new design possibilities, combining integral colour, imagery, and a tactile experience with soft touch texture.

KYDEX<sup>®</sup> T+SG is a proprietary, high performance thermoplastic sheet with a tactile, anti-slip surface making it ideal for tray table inlays. The product stands up to harsh disinfectants and resists staining.

### **CLICK HERE TO LEARN MORE**

InfusedImaging + surfaceGrip

KYDEX<sup>®</sup> T+SG with Infused Imaging<sup>™</sup> Technology, putting colour and imagery into thermoplastic material.

Not on it.



appLab designLab FSTLab

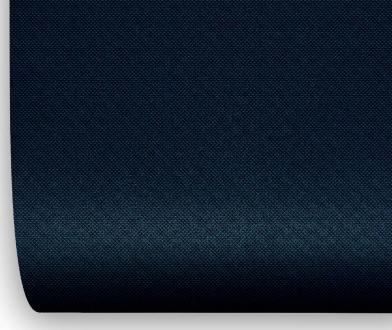
Passenger health and safety are at the forefront of the passenger experience, requiring materials that are chemical resistant, antimicrobial, durable, and stain resistant.

KYDEX<sup>®</sup> Thermoplastics are inherently antimicrobial and available with a range of additional antimicrobial protection options.

KYDEX<sup>®</sup> ION Technology<sup>™</sup> and KYDEX<sup>®</sup> MB products are available with custom colour, pattern, and texture.

They are ideal for high touch areas such as tray tables, seat backs, armrests, luggage racks, and bulkhead components.

## ANTIMICROBIAL



#### ION Technology<sup>TM</sup> PREMIUM PROTECTION

### KYDEX® T-ION **U**

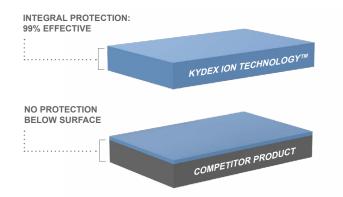
- 99% effective at inhibiting the growth of stain and odor causing bacteria
- Chemical Resistant
- UV-B & UV-C Resistant
- FMVSS-302 Compliant

### Antimicrobial MB

### KYDEX® T MB 🕔

- In service since 2009
- Chemical Resistant
- UV-B & UV-C Resistant
- FMVSS-302 Compliant





Disclaimer: KYDEX® Thermoplastics incorporate an advanced EPA-registered antimicrobial for the protection and preservation of our polymeric and plastic materials. KYDEX® Thermoplastics are treated only to protect the polymeric and plastic materials and do not confer protection from bacteria to users of our products. Always clean the product thoroughly after use. To learn more about KYDEX ION Technology<sup>TM</sup> or to have a technical conversation, contact our appLab<sup>TM</sup> team at appLab@kydex.com or 800.682.8758.



## CUSTOMIZATION CREATED THROUGH INNOVATION

The SEKISUI KYDEX Innovation Centers, designLab® and appLab<sup>™</sup>, are where engineering and design meet. They are collaborative spaces for clients and customers to bring the supply chain together for rapid prototyping and to inspire colour, material, and finish designers. Every interaction is curated to help customers reach their goals. Focused not only on products and processes, they are also designed for paths of discovery and exploration. Visitors explore 'what if?' questions and leave with tangible, actionable ideas.

## designLab

designLab<sup>®</sup> is where art and science combine in a collaboration space for industry thought leaders to develop a deeper understanding of colour and design. Explore the latest in 3D virtualization with X-Rite's TAC<sup>™</sup> Ecosystem. Use vivid colours, textiles, imagery, technology, and real-world examples to create your own prototype.

- designLab<sup>®</sup> Exploration
- Infused Imaging<sup>™</sup> Design
- Custom Colour Creation
- X-Rite TAC<sup>™</sup> Ecosystem

hermoforming KYDEX® inside

Inside appLab<sup>™</sup>, OEM industrial engineers and designers have plenty of room to explore – and ideas have plenty of room to grow. The appLab team uses dedicated fabrication tools, test equipment, and technology to develop, refine, and produce custom solutions that are production ready.

- Part Prototypes
- Mold Design
- Certifications and Regulatory
  Testing Thermoforming Requirements
- Thermoplastics Training
- Physical Properties







		Download Tech Data Sheets	EN45545-2 R1 & R6	DIN 5510 (-2 S4, ST2, SR1 OR 2)	ASTM E 162 & 662	SMP 800C	
	SOLID	KYDEX <sup>®</sup> 2200LTu	O				•
		KYDEX <sup>®</sup> 2210LTu	0	-		NOT TESTED	NOT TESTED
		<b>KYDEX® 6200</b>	O		•		
INTERIOR	CAPPED	KYDEX <sup>®</sup> 2200LT	O				•
INTE		KYDEX <sup>®</sup> 2210LT	Θ	-		NOT TESTED	NOT TESTED
		KYDEX <sup>®</sup> 2200LTd	Θ				•
		KYDEX <sup>®</sup> 2210LTd	O	-		NOT TESTED	NOT TESTED
		KYDEX <sup>®</sup> 6200d	Θ			-	

Bus		Download Tech Data Sheets	GLOSS	IMPACT	FMVSS-302	ASTM E 162 & 662	WEATHERABLE
~	PVC	KYDEX® T	-	HIGH			
		KYDEX <sup>®</sup> 6200		MEDIUM			
		KYDEX® 6200d		MEDIUM			
	ABS	ALLEN® 2030LG	LOW	MEDIUM	-		
		ALLEN® 2040LG	LOW	HIGH	-		
INTERIOR		ALLEN® 2065MT	MATTE	HIGH	•		
Z		ALLEN® 2095MG	MEDIUM	HIGH	•		
		ALLEN <sup>®</sup> 2155HG	HIGH	HIGH	•		
		ALLEN® 2057MT	MATTE	HIGH	•		
		ALLEN® 2160HG	HIGH	HIGH	•		
	FR PC/ ABS	ALLEN® 8300FR	HIGH	HIGH	-		
	Acrylic/ABS	ALLEN <sup>®</sup> 6000	LOW	MEDIUM	-		
		ALLEN® 6010	LOW	MEDIUM			
	2	ALLEN® ALEXTRA® ET	HIGH	VERY HIGH	-		•
EXTERIOR	ASA/ABS	ALLEN <sup>®</sup> 5050WLG	LOWER	HIGH	-		•
EXTE		ALLEN® 5100WMG	MEDIUM	HIGH	•		•
		ALLEN <sup>®</sup> 5160WHG	HIGH	HIGH	•		•
		ALLEN <sup>®</sup> 5200WHG	HIGH	VERY HIGH	-		•
	TPO	ALLEN® T3050LG	LOW	HIGH	-		AVAILABLE UPON REQUEST

