

# RESINDEK<sup>®</sup> XSPAN<sup>®</sup> & XSPAN<sup>®</sup> FR PANELS PRODUCT SHEET



ResinDek® Xspan® and ResinDek® Xspan® FR flooring panels are designed for heavy equipment, rolling pallet jacks, and robotic traffic (AGVs and AMRs). The panels have been extensively tested and approved by IBC Code Officials for use as a structural flooring system without a metal corrugated substructure. Structural supports must be reviewed and approved by Cornerstone Specialty Wood Products, LLC® and must be capable of supporting floor loads at specific intervals. Contact us or your local building code official for more information.

## SUSTAINABILITY PANEL CONSTRUCTION WITH EXTREME DURABILITY

ResinDek proprietary panels are manufactured with mostly recycled and recovered wood fibers, environmentally friendly resins with no added urea formaldehyde, and increased wax emulsifiers for moisture resistance. The ingredients are combined and compressed under extremely high pressure and temperature, resulting in a panel with superior physical properties. ResinDek panels meet MR50 classification, the most stringent composite panel requirement for moisture resistance.

ResinDek Xspan and Xspan FR panels are 28 mm thick and available in sizes up to 1206 mm x 3048 mm. Each panel features a tongue-and-groove configuration that effectively promotes panel to panel wheel load transfer. When required, tongue-and-groove configurations are available on all 4 sides or with square edges.

#### ResinDek® Xspan® FR Fire-Resistant Structural Panel

ResinDek Xspan FR is a fire-resistant structural mezzanine floor solution that does not require a metal corrugated substructure. It meets ASTM E-84 Class "A" flame spread less than 25, meets UK Class "O", and meets European standards B-Class (B<sub>FL</sub>-s1 | B-s1,d0) for both top and bottom.

# **ResinDek<sup>®</sup> Xspan<sup>®</sup> and Xspan<sup>®</sup> FR Flooring Panels** 28 mm Thick Single Panel Solution - No Corrugated B-Deck Required

28 mm Thick Single Panel Solution - No Corrugated B-Deck Required Panel Weight: 25.4 kg/m² (32.3 kg/m² with MetaGard)

Beam Spacing	<b>400 mm</b>	<b>600</b> mm	800 mm	1,000 mm	1,200 mm
Uniform Loads (kN/m <sup>2</sup> )	18.1	10.9	6.1	3.8	2.5
Total Pallet Jack & Product Load (kgs)	1,365	1,230	1,045	910	685
Total Robot & Product Load (kgs)	1,135	910	685	N/A	N/A
Robot Contact Pressure (MPa)	6.2	5.2	4.1	N/A	N/A

#### **Finishes**

Material Handling Finishes		<b>Robotic Finishes</b>		
UF	Gray Diamond Seal® or ESD	MetaGard® GVT	TriGard <sup>®</sup> ESD or ESD Ultra	MetaGard <sup>®</sup> SST
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#### NOTES:

- Testing completed with polyurethane caster wheels, any deviation or alternative wheels such as crowned, steel or plastic could void the warranty. Contact Cornerstone for more information.
- Robotic contact pressure values are to be used as a guide. Please consult factory for specific robot usage.
- All allowable loads are based on a two span condition. Uniform load values are based on L/240 deflections, any deviation can positively or negatively impact these values. Please contact Cornerstone for other span conditions.
- The calculations and load table to the left have been compiled based on specified calculation methods and assumptions. The loads provided are for the purpose of information for preliminary studies and cannot be used as a reference in structural studies. Contact an accredited engineering office or architect to perform a complete stability analysis.





# RESINDEK® XSPAN® & XSPAN® FR PANELS PRODUCT SHEET

### **RESINDEK® PANEL FINISHES**

ResinDek panels are available in a variety of finishes depending upon the application requirements. The coatings are developed by our internal coating innovation lab, so they are incredibly durable and engineered specifically for pallet jacks, AGVs, and AMRs. The panels are also available with a steel finish for iron clad protection in areas with extreme ware.

#### Gray Diamond Seal<sup>®</sup> & Gray Diamond Seal<sup>®</sup> ESD - Engineered for Heavy Rolling Pallet Jack Traffic

- · Provides excellent wear, slip prevention, and exceptional resistance to common stains
- Easy to clean & maintain, ResinDek panels coated with the Gray Diamond Seal finish preserves its pristine, showcase appearance year after year
- If your application requires electrostatic dissipative (ESD) finish, please specify Gray Diamond Seal ESD

#### **TriGard® ESD Finish - Engineered for AMR Traffic**

- Perfect flooring finish for autonomous mobile robots that use lidar navigation system or a variable path
- Engineered to withstand high-frequency robotic traffic
- Optimal coefficient of friction, allowing robot to run at it's peak performance
- Ideal degree of light reflectivity that does not impair a vehicle's laser-based navigation sensors

#### TriGard® ESD Ultra Finish - Engineered for AGV & AMR Traffic

- Ideal for high-traffic robotic applications characterized by highly repetitive movement
  patterns, defined travel paths or some type of fiducial
- Innovative finish that provides more than 2X greater wear than the TriGard ESD coating
- Optimal coefficient of friction, allowing robot wheels to travel fluidly and with precision
- Coating can be modified for surface roughness and light reflectivity

#### MetaGard® Steel Surface - Engineered for Extreme Wear

The MetaGard steel surface is fused to the ResinDek panel with a proprietary bonding agent and features an edge that encapsulates the perimeter of the panel - creating a floor that will not delaminate, has superior physical properties, is level for rolling loads, and has no sharp edges to cut or snag objects passing over it. ResinDek with MetaGard can be used with other ResinDek finishes to create a cost-effective hybrid flooring solution.

- MetaGard<sup>®</sup> GVT is ideal for drop zones, pallet flow and case flow modules and where aggressive dragging or pulling of non-wheeled loads occurs
- **MetaGard® SST** is recommended for heavily trafficked areas where dirt and debris are not routinely removed, such as 24/7 operations that may be quarantined from employees

### **BOTTOM SIDE PANEL FINISH**

In addition to the fire-resistant capabilities, ResinDek Xspan FR panel comes standard with a white reflective underside. Whereas ResinDek Xspan panel is standard with an unfinished underside.



### **10-YEAR PRODUCT WARRANTY**

Cornerstone Specialty Wood Products, LLC<sup>®</sup> hereby warrants ResinDek panels to be free from defect, structurally sound, and able to safely carry the specified design loads. The warranty will flow through and transfer to the end user for the entire period of the warranty.

### SCS GLOBAL CERTIFICATIONS, LEED<sup>®</sup> AND FSC<sup>®</sup>

ResinDek panels are certified to have No Added Formaldehyde and conform to SCS Recycled Content Standard V7-0. ResinDek panels can contribute towards earning points for LEED® qualified buildings. When required ResinDek panels are available with FSC® Certification. FSC® License Code FSC-C124474.



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