

ResinDek<sup>®</sup> flooring panels, manufactured by Cornerstone Specialty Wood Products<sup>®</sup>, are the value engineered elevated flooring solution for cold storage environments. Since 1994, ResinDek flooring panels have been installed in distribution centers, manufacturing plants, warehouses and cold storage facilities for major corporations worldwide. The intent of Cornerstone Specialty Wood Products then and now is "We don't just make better mezzanine floors...We make mezzanine floors better".

ResinDek flooring panels are custom manufactured with engineering processes which enhance the functionality, durability and life of the floor. ResinDek flooring panels utilize premium materials and manufacturing methods ensuring that every elevated floor panel will withstand heavy equipment, rolling carts and pallet jack loads.

With seven different grades of ResinDek flooring panels, Cornerstone Specialty Wood Products has earned a reputation for high quality products that are reliable, durable and competitively priced. ResinDek panels can contribute towards earning LEED<sup>®</sup> credits and when required are available with FSC certification. Additionally, ResinDek panels have been independently, ergonomically tested and proven to more comfortable to walk and work on when compared to concrete and bar grate, thus reducing the chance for injury caused by tibial shock.

<b>ResinDek</b> <sup>®</sup>	Mezzanine Floor Panel			RODUCT WARRANTY			
Product Name	Pallet Jack Load Limits **	Thickness	UF	Finishes Available GDS2 ESD TriGard® MetaGard®			
ResinDek <sup>®</sup> LD	up to 2,000 lbs.	3/4"					
ResinDek <sup>®</sup> SD	up to 2,500 lbs.	3/4"					
ResinDek <sup>®</sup> MD	up to 3,500 lbs.	3/4"	n/a				
ResinDek <sup>®</sup> HD	up to 4,500 lbs.	3/4"	n/a				
ResinDek <sup>®</sup> MAX	up to 8,000 lbs.	1-1/2"	n/a				
* ResinDek <sup>®</sup> Xspan <sup>®</sup>	up to 3,000 lbs.	1-1/8"	n/a				
* ResinDek <sup>®</sup> Xspan <sup>®</sup> FR	up to 3,800 lbs.	1-1/8"	n/a				
Finishes Available Unfinished Gray Diamond Seal® <b>2</b> ESD Certified Static Cor TriGard <sup>®</sup> MetaGard <sup>®</sup>				All ResinDek Products can contribute towards earning points for LEED® qualified buildings. * No Corrugated Required ** Includes Weight of Pallet Jack			

## Are You Sure You Need Concrete for Your Cold Storage Mezzanine?



ResinDek<sup>®</sup> moisture resistant flooring panels are an extremely effective choice for mezzanine flooring in cooler and freezer environments. ResinDek panels provide the strength you associate with a concrete floor, yet saves you tens of thousands of dollars, is easier to walk on than bar grate and will not delaminate like polydeck. Plus, unlike concrete, ResinDek flooring panels allows the owner of the facility the flexibility to adapt to future changes or expansion within their building.

Selecting ResinDek flooring panels instead of concrete saves at least 30 lbs. per square foot of dead load on the structure, which equals 1,500,000 lbs. on a 50,000 sqft. industrial work platform! Concrete structures need to be considerably more rigid to prevent damage to the concrete decking that comes with flexure. To avoid flexural failures, and unsightly cracking, concrete decking flexure must be limited to no more than L/360, while ResinDek Flooring Systems can be easily designed for L/240 deflections.

With a properly designed flooring system, using ResinDek instead of concrete reduces the flooring system dead weight by 90%! The reduced weight, coupled with an increased allowable deflection, allows for a 25% reduction in the amount of steel in the substructure. As an added bonus, concrete footings can be significantly reduced, and sometimes eliminated altogether for even greater savings. *It is quite common to save up to \$5/sqft\* when using ResinDek instead of concrete on elevated cold storage platforms.* In other words, reduced flooring system weights, combined with smaller footings and less steel and greater allowable deflections. All of these design advantages equal Big Savings!

\*Actual savings may vary based on project scope and location.

### **ResinDek®** Floor Panels are the Value Engineered Solution for Cold Storage Facilities

All ResinDek engineered flooring panels are custom manufactured with specially sorted and processed wood fibers, customized formaldehyde free resins, and a wax emulsifier. The ingredients are combined and compressed under extremely high pressure and temperature, resulting in a panel with superior physical properties that are especially designed to withstand the daily rigors of warehouse mezzanines and cold storage environments.

#### ResinDek<sup>®</sup> LD, SD, MD, HD and MAX

ResinDek flooring panels provide a tremendous value for elevated floors in cold storage facilities and warehouse mezzanines that require durability, a showcase appearance, and ease of maintenance. ResinDek floor panels have proven structural integrity and support live and dead pallet jack loads from 2,000 - 8,000 lbs. ResinDek panels are custom manufactured and available in sizes up to 4' x 10'.

#### ResinDek<sup>®</sup> Xspan<sup>®</sup> and Xspan<sup>®</sup> FR

ResinDek Xspan and Xspan FR are a 1-1/8" thick panel that offers the look, maintainability and performance of ResinDek in a structural flooring solution where a metal corrugated substructure is not required. ResinDek Xspan has been extensively tested and is capable of supporting 125 psf dead loads at 32" center supports and 2,300 lb. pallet jacks loads without corrugated metal B deck. ResinDek Xspan FR (flame resistant) panels are even stronger than regular ResinDek Xspan. ResinDek Xspan FR is tested and capable of supporting 275 psf dead loads at 32" center supports and 3,000 lb. pallet jack loads (refer to the website for load span tables for ResinDek Xspan). ResinDek Xspan FR meets ASTM E-84 Class "A" flame spread less than 25, meets UK Class "O", as well as European standards EN 13501-1 and is rated as  $C_{FL}$ -s1.



#### **Beautiful, Long-Lasting Textured Finish**

Gray Diamond Seal 2<sup>™</sup> is the standard by which all other coatings in our industry are measured. This superior finish is designed and engineered for long-lasting durability and will look beautiful with a showcase appearance year after year. Gray Diamond Seal 2<sup>™</sup> has exceptional resistance to common stains and has been tested in accordance with NEMA LD 3.4 with 29 different reagents, and has been proven to be extremely easy to keep clean. In addition, the textured finish meets OSHA Standards for coefficient of friction regardless of whether the floor becomes wet, dry, dirty, or clean! Be sure to ask us about our TriGard<sup>™</sup> coating for ultra-high rolling traffic typically found in robotics applications.

#### **Testing and New Product Developement**

Cornerstone Specialty Wood Products' team never stops evaluating and testing new approaches for mezzanine floors. Cornerstone specializes in the development of testing methods that accurately replicate field conditions. Accelerated life testing is used to understand the panel integrity and load capacity.

In the image below, a refrigerated truck was used to test ResinDek<sup>®</sup> MAX in a freezer environment. ResinDek MAX flooring panel was subjected to the equivalent of 10,000 pounds on a rolling pallet jack with the inside temperature of 0°F. The test proved very successful with over 100,000 cycles, which far exceeded our warranty of 8,000 pounds.



ResinDek<sup>®</sup> MAX flooring panel subjected to the equivalent of 10,000 pounds on a rolling pallet jack inside a refrigerated truck. The infrared camera inside the truck shows the temperature is a frigid 0°F.

#### **ResinDek® 10-Year Product Warranty**

Cornerstone Specialty Wood Products<sup>®</sup> warrants all of its ResinDek<sup>®</sup> panels to be free from defect, structurally sound, and able to safely carry

the specified design loads as specified. At our discretion we will either replace or make a reasonable allowance for repair to all ResinDek panels found to be defective for a period of ten (10) years from date of shipment to job site.



#### **ResinDek® Provides Ergonomic Mezzanine Solutions**

ResinDek used in place of concrete or bar grate can help decrease the risk of work injuries, absenteeism and insurance claims. According to an independent study conducted by Dr. Steve Lavender for The Ohio State University's Institute for Ergonomics:

- There was significantly less tibial shock with ResinDek at work rate walking speed. Work rate walking speed defined as walking 15% faster than an average walking pace.
- Concrete increased the tibial shock by 5.4% at the work rate walking speed
- Bar grate work rate walking pace showed an increased tibial shock rate of 10.6%

Read what one Warehouse Director had to say about ResinDek Flooring: "We have been pleasantly surprised at the durability of the ResinDek panels. In the past we have used concrete, bar grate, and polydeck. Our space is subjected to temperatures ranging from 55 degrees to -20 degrees F, and we do not "baby" our floors. Each flooring type has its advantages and disadvantages, but ResinDek panels are a solid choice for us. They are less expensive than concrete, and easier to walk and transport our products on than bar grate. We are moving 6,000 cases per day from this facility, so our floors see a lot of traffic."



© May 2019 Cornerstone Specialty Wood Products, LLC<sup>\*</sup> All rights reserved. Cornerstone Specialty Wood Products, LLC, the Cornerstone logo, the 10-year warranty logo, ResinDek, The Panel of Experts, Xspan, TriGard, Diamond Seal 2, MetaGard and Invisi-Loc are trademarks of Cornerstone Specialty Wood Products, LLC<sup>\*</sup>. ResinDek with MetaGard Patent Pending

In our continuing effort to improve our products, some specifications or descriptions may change. We reserve the right to make such changes without notice or recourse.

# the panel of experts

# Flooring Solutions for Cold Storage Mezzanines

