

resinDEK[®]

Manufactured by:



CORNERSTONE
SPECIALTY WOOD PRODUCTS, LLC[®]



—◆ *Performance Engineered Flooring for Self-Storage Facilities*

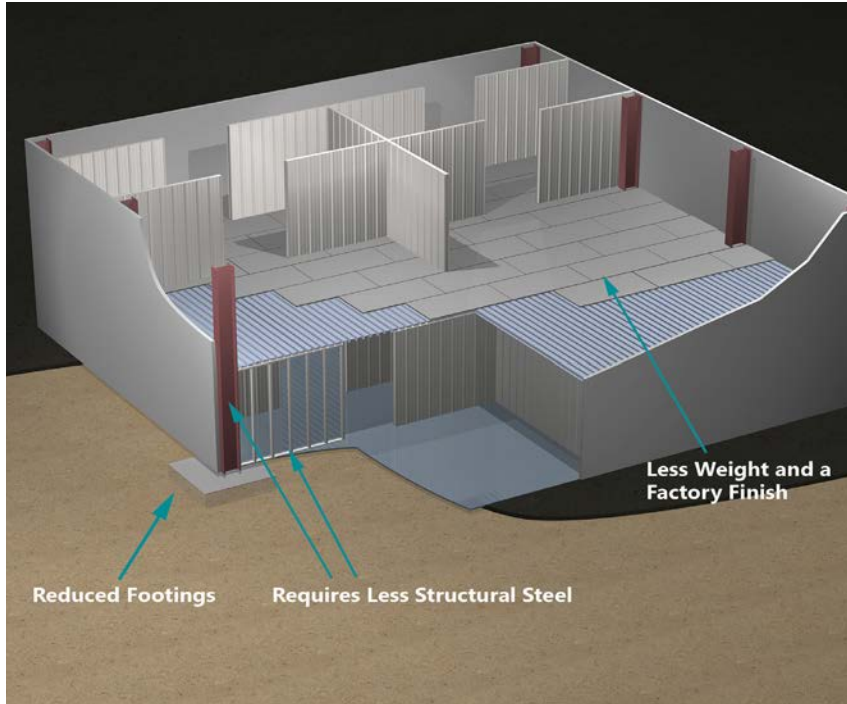
ResinDek® flooring panels, manufactured by Cornerstone Specialty Wood Products, LLC® provide tremendous value for multi-story Self-Storage buildings. ResinDek composite engineered wood flooring panels are extremely durable, provide a showcase appearance and are easy to maintain. They have the proven structural integrity and the strength you associate with a concrete floor yet can offer savings of tens of thousands of dollars. ResinDek panels offer a compelling value for both new construction and retrofitting existing facilities and is backed by a 10-year product warranty.

How can you realize savings of up to \$5/sqft by using ResinDek instead of concrete and get a product that is backed by a 10-year warranty? Simple, install ResinDek flooring.

- ResinDek is at least 40 lbs per square foot lighter than concrete which allows for less steel to be used in the support structure, along with potential savings in the foundation and footers
- ResinDek is supplied with a factory finish so tracks can be laid for the storage units immediately after the flooring is installed. Concrete typically needs a week or more to cure before tapcons can be used to continue construction
- ResinDek has an allowable deflection of L/240 whereas concrete's allowable deflection is L/360. This creates a more ergonomic platform and again allows for less steel in the support structure
- Material cost per square foot is less than that of concrete



ResinDek® Flooring Compared to Elevated Concrete Floors



Cost Savings & Speed of Construction

- ResinDek panels are 85-90% lighter than concrete, allowing for less steel in support structure/reduced footings
- Platforms using ResinDek panels can be designed with an allowable deflection limit of $L/240$, whereas concrete's allowable deflection is limited to $L/360$; reducing the amount of steel required in the support structure
- An independent study found ResinDek flooring to be more cost effective than concrete
- ResinDek is supplied with a factory finish, concrete needs time to cure

Flooring Solution Engineered for Durability & Designed for Aesthetics

ResinDek engineered wood flooring panels easily support 125 psf uniform loads and rolling pallet jack loads from 2,000 to 8,000 lbs. ResinDek panels are custom manufactured with processes which enhance the functionality, durability, and life of the floor. They are produced with mostly recycled and recovered wood fibers, environmentally friendly resins with no added urea formaldehyde, and a wax emulsifier. The ingredients are combined and compressed under extremely high pressure and temperature, resulting in a panel with superior physical properties.

ResinDek panels are formulated in different thicknesses and densities to meet the requirements of varying load capacities for different applications. Most Self-Storage facilities choose ResinDek LD, a 3/4" thick panel used in conjunction with a corrugated metal deck. Each panel comes standard with tongue and grooves along the long edges and are available on all four sides or with a square edge. ResinDek panels are available in sizes up to 4' x 10' (1206mm x 3048mm). ResinDek with MetaGard maximum size is 4'x 8' (1206mm x 2438mm).



ResinDek® Panel Finishes for Self-Storage Facilities

Gray Diamond Seal® Finish

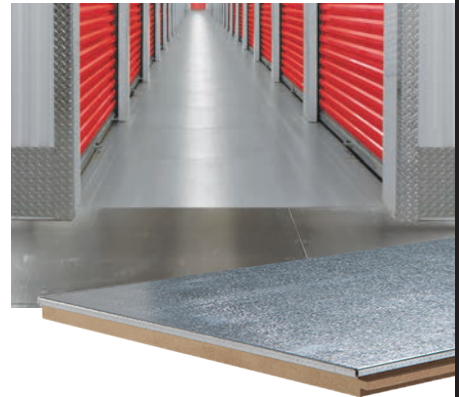
Gray Diamond Seal was developed by our internal coating innovation lab and is a beautiful, long-lasting textured finish.

- Provides excellent wear, slip resistance & exceptional resistance to common stains
- Easy to clean & maintain, and will provide a showcase appearance year after year
- The formulation incorporates standard antistatic protection to minimize the build-up of electrical charges as personnel and wheeled loads travel over it

MetaGard® GVT Finish

MetaGard GVT is a steel surface that encapsulates the top and sides of the ResinDek panel and is the perfect solution for heavy wear areas in Self-Storage facilities.

- The steel is fused to the ResinDek panel with a proprietary bonding agent creating a floor that will not delaminate, has superior physical properties, is level for rolling loads, and has no sharp edges that could cut or snag objects passing over it
- ResinDek with MetaGard has been tested per ASTM D2047 standards and has been found to meet or exceed OSHA specification for slip resistance.
- Engineered to ensure a smooth panel-to-panel transition, ResinDek with MetaGard GVT panels can be used alongside other ResinDek panels without a steel surface, creating a more cost-effective solution.



ResinDek® Flooring Certifications & Ratings

SCS Global Certifications, LEED® and FSC®

ResinDek panels are certified to have No Added Formaldehyde and conforms 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.



Limited Outdoor Exposure (L.O.E.)

ResinDek panels are available with optional L.O.E. enhancement modifications that help drain rainwater away from the panel during facility construction for a ltd. amount of time.



Uniform Evaluation Service Report

IAPMO's Uniform Evaluation Service (UES) has issued a Uniform Evaluation Service Report verifying that ResinDek engineered flooring panels manufactured by Cornerstone Specialty Wood Products, LLC® are in compliance with International Building Code (IBC), International Residential Code (IRC) and UL Fire-Resistance ratings.

Furthermore, ResinDek LD has been approved for use in Types I-V construction and as part of a fire-resistance rated assembly. United States ER Number 467. Canada ER Number UEL 5027.



UL Classification and Flame Spread Index

ResinDek® flooring system can be UL Classified for up to a 2 hour fire rated assembly under UL Design No. L701 and UL File No. R39265.

When tested in accordance with ASTM E84, the ResinDek panels plus the corrugated metal deck assembly meet Class A criteria for an interior finish. ResinDek Xspan FR is a fire resistant panel and meets ASTM E-84 Class "A" flame spread less than 25, meets UK Class "0", and meets European standards B-Class (B_{FL}-s1 | B-s1,d0) for both top and bottom.

Types of ResinDek® Flooring Panels for Self-Storage Facilities

Product Name (B Deck Gauge)	Pallet Jack & Product Load Limits	Thickness	Weight (PSF)		Material Handling Finishes		
			ResinDek®	ResinDek® with MetaGard®	UF	Gray Diamond Seal® or ESD	MetaGard® GVT
ResinDek® LD (20ga)	up to 2,000 lbs.	3/4"	2.8	4.2	✓	✓	✓
ResinDek® MD (20ga) ResinDek® MD (18ga)	up to 2,500 lbs. up to 3,500 lbs.	3/4"	3.5	4.9	✓	✓	✓
ResinDek® HD (18ga)	up to 4,500 lbs.	3/4"	3.8	5.2	✓	✓	✓
ResinDek® MAX (18ga)	up to 8,000 lbs.	1-1/2"	7.6	N/A	N/A	✓	✓
ResinDek® Xspan® <i>B Deck Not Required</i>	up to 3,000 lbs.	1-1/8"	5.2	6.6	✓	✓	✓
ResinDek® Xspan® FR <i>B Deck Not Required</i>	up to 3,000 lbs.	1-1/8"	5.2	6.6	✓	✓	✓

NOTES FOR TABLE:

- For flooring used with corrugated B Deck: Load values are calculated on 36" beam spacing, increased spacing will increase deflection and/or decrease capacity
- For flooring solutions with no B Deck: 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 tables 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 can not be used as a reference in structural studies. Contact an accredited engineering office or architect to perform a complete stability analysis.
- ResinDek Xspan and Xspan FR load values above are calculated with 375 psf uniform loads at 16" center supports

ResinDek® Corrugated Metal Decking - B-Deck

We recommend that a minimum of 20 gauge metal B Deck be used on all ResinDek® flooring projects (with the exception of Xspan®) and a minimum of 18 gauge when live and dead pallet jack loads exceed 2,500 lbs.

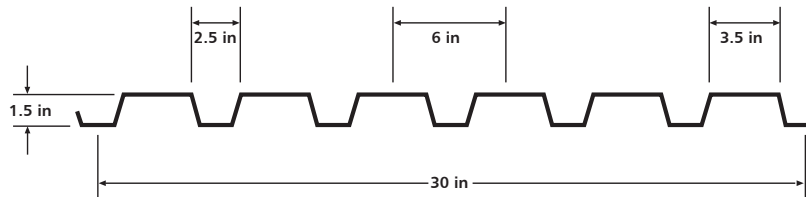
B-Deck 1.5" Allowable Uniform Loads (PSF) / Loads that Produce L/240 Deflection

# of Spans	Gauge	Min Yield (KSI)	36"	42"	48"	54"	60"	66"	72"	78"	84"	90"
Single	20	60	565 / 462	415 / 291	318 / 195	251 / 137	203 / 100	168 / 75	141 / 58	120 / 45	104 / 36	90 / 30
	18	60	792 / 658	582 / 414	445 / 278	352 / 195	285 / 142	236 / 107	198 / 82	169 / 65	145 / 52	127 / 42
	16	33	575*	422*	323*	255*	207 / 186	171 / 140	144 / 108	122 / 85	106 / 68	92 / 55
Double	20	60	563*	418*	322*	256*	208*	172*	145*	124 / 116	107 / 93	93 / 75
	18	60	788*	586*	452*	359*	292*	242*	204 / 202	174 / 159	150 / 127	131 / 103
	16	33	552*	410*	317*	252*	205*	170*	143*	122*	105*	92*
Triple	20	60	692*	516*	399 / 388	317 / 273	258 / 199	214 / 149	180 / 115	154 / 91	133 / 72	116 / 59
	18	60	966*	722*	558 / 534	445 / 375	362 / 273	300 / 205	253 / 158	216 / 124	187 / 100	163 / 81
	16	33	676*	505*	391*	311*	254*	210*	177*	152*	131 / 128	114 / 104

Note: Allowable Uniform Load shown only. L/240 Exceeds Allowable Load.

B-Deck Physical Properties

Gauge	Thickness (in)	Weight (lb/ft ²)	
		Painted	Galvanized
20	.0358	2.1	2.2
18	.0474	2.8	2.9
16	.0598	3.4	3.5



ResinDek® Corrugated Metal Decking - N-Deck

Cornerstone Specialty Wood Products, LLC® provides corrugated metal deck products in a variety of profiles, thicknesses, yield strengths and finishes. We will help you optimize sizes, runs, steel thicknesses, corrugated profiles, and beam spacings.

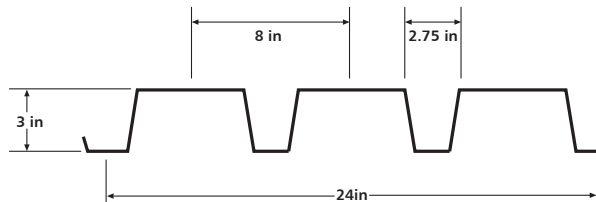
N-Deck 3.0" Allowable Uniform Loads (PSF) / Loads that Produce L/240 Deflection

# of Spans	Gauge	Min Yield (KSI)	84"	90"	96"	102"	108"	116"	120"	126"	132"	138"
Single	20	60	219 / 160	191 / 130	168 / 107	149 / 89	133 / 75	119 / 64	108 / 55	98 / 47	89 / 41	81 / 36
	18	60	325 / 236	283 / 192	249 / 158	220 / 132	196 / 111	176 / 94	159 / 81	144 / 70	132 / 61	120 / 53
	16	40	290*	253*	222*	197 / 186	175 / 157	157 / 133	142 / 114	129 / 99	117 / 86	107 / 75
Double	20	60	224*	209*	189*	168*	150*	135*	122*	111*	101*	92*
	18	60	349*	304*	268*	238*	213*	191*	173*	157*	143*	131*
	16	40	305*	266*	234*	208*	186*	167*	151*	137*	125*	114*
Triple	20	60	255*	238*	223*	208 / 192	186 / 161	167 / 137	151 / 118	137 / 102	125 / 88	115 / 77
	18	60	430*	378*	333 / 323	295 / 269	264 / 227	237 / 193	215 / 165	195 / 143	178 / 124	163 / 109
	16	40	378*	330*	291*	258*	231*	207*	187*	170*	155*	142*

Note: Allowable Uniform Load shown only. L/240 Exceeds Allowable Load.

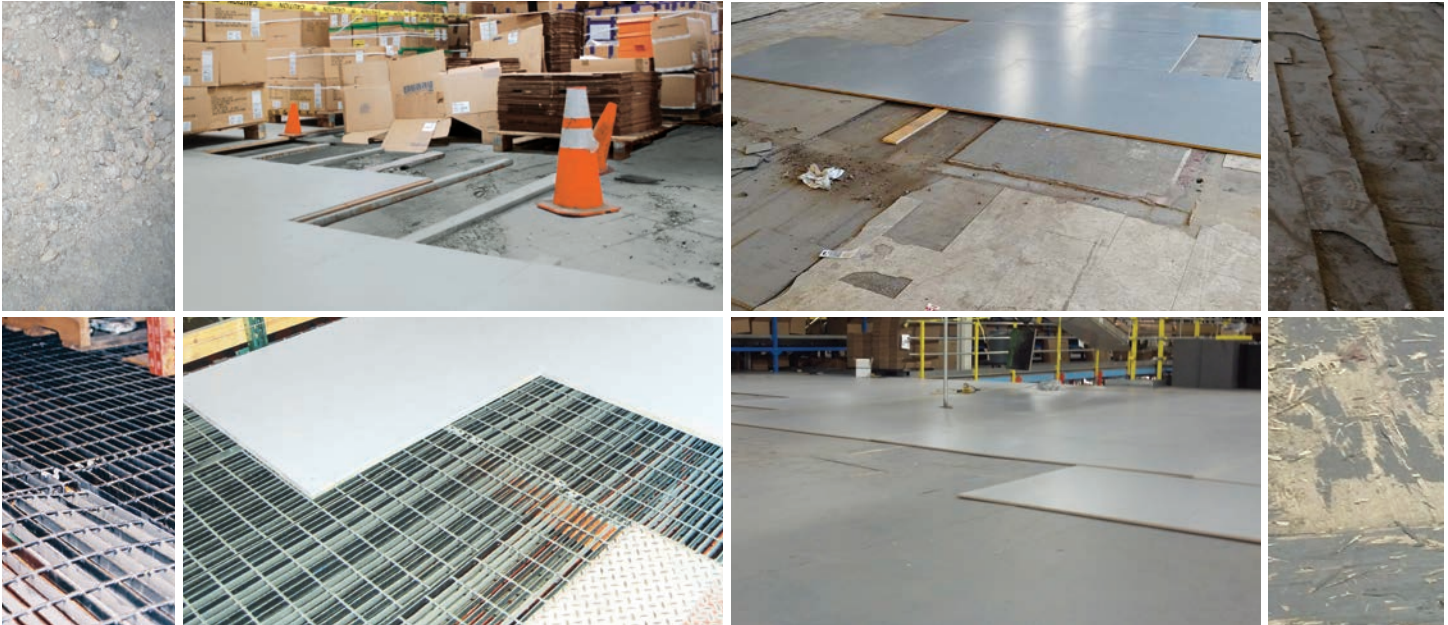
N-Deck Physical Properties

Gauge	Thickness (in)	Weight (lb/ft ²)	
		Painted	Galvanized
20	.0358	2.5	2.5
18	.0474	3.2	3.3
16	.0598	4.1	4.2



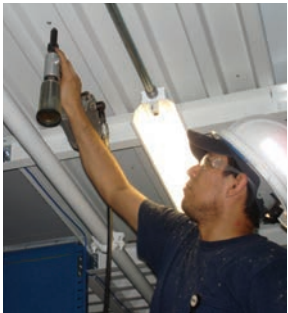
ResinDek® Panels - The Rework Solution for Self-Storage Conversion Projects

If you are converting an existing facility ResinDek panels are the optimal choice. ResinDek panels can be installed over cracked concrete, floors that are delaminating, plywood that is splintering and even over damaged bar grate.



Stand-Up Screwdriver & Top Side Drill Screws

For conventional top side screw installation, use Cornerstone Specialty Wood Products, LLC® collated stand-up screwdriver and collated drill screws. Not only will the collated screwdriver save you up to 40% in fastening costs, but it will reduce installation fatigue with its ergonomic design. The screws are engineered for strength, durability and easy installation. No countersinking or pre-drilling is required as the wings near the top of the shaft create a counterbore for the screwheads. The number 2 square drive head in conjunction with the drill point easily pierce up to 12 gauge steel decking. The screws are designed to drill through the ResinDek panels and steel decking prior to the threads engaging, thus preventing the panels from lifting.



Invisi-Loc® Underside Fastening System

Invisi-Loc provides showcase mezzanine floors with no visible fasteners that are dependable, economical and easy to install. The Invisi-Loc fastening system mounts fasteners under the mezzanine decking hiding unwanted screw holes on top. Plus, when installed with our pre-punched corrugated metal decking, installation time is reduced and potentially dangerous metal shavings are eliminated.

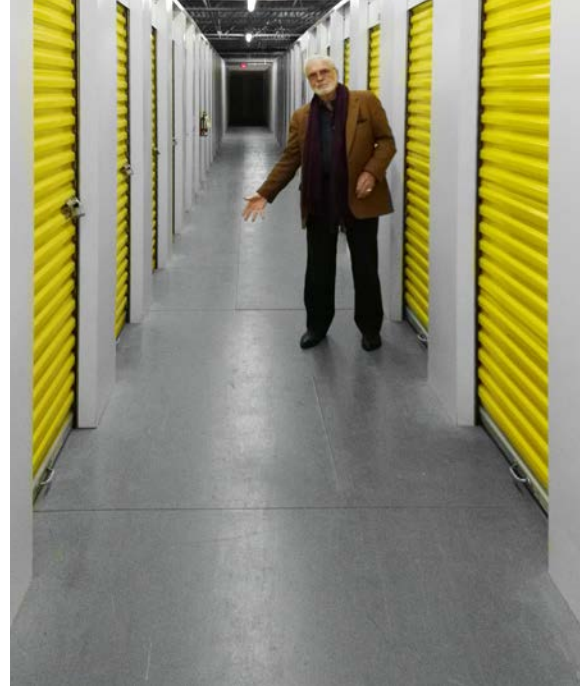


Success Story: Multi-Level Self-Storage Facility Elevates Revenues with ResinDek® Panels

ResinDek® flooring panels, manufactured by Cornerstone Specialty Wood Products, LLC®, are the value engineered solution for Multi-Level Self-Storage Facilities. ResinDek panels provide the strength you associate with a concrete floor, yet save you tens of thousands of dollars and can be easily installed over existing storage units! But don't take our word for it: read what Hal Spradling, owner of All Canadian Self-Storage had to say about ResinDek flooring.

"I was first introduced to ResinDek panels by an Ontario company who had been using ResinDek for 12 years", said owner Hal Spradling. *"Because of the price, delivery, installation, pre-finished surface, durability, structural integrity and great finished floor appearance, I decided to try it".*

"We first installed ResinDek panels on our second level of storage units at our Weston location about three years ago. Not only was it less expensive than concrete, it was considerably less disruptive to our existing business. The ResinDek panels went in quickly, and could be installed directly over existing storage units without the need to evacuate the occupied units while the second level was being installed. After three years, the floor still looks great. We will be using ResinDek panels instead of concrete on all future construction, including a very large new four level, 220,000 sqft. facility later this year. For All Canadian Self-Storage, this investment makes a lot sense".



Success Story: Self-Storage Saves Time & Money with ResinDek® Flooring

Storage Fox is no newcomer to the Self-Storage Industry. Their current facility in White Plains, NY is their fourth project undertaken in the last six years. Each project has its own unique challenges. The current project is a ground + 2 level structure, consisting of approximately 20,000 sf per level.

Local code officials originally told Storage Fox that a ground plus two level structure exceeded the F.A.R. (Floor Area to Footprint Ratio) requirements for the site. As such, the initial recommendation was for a ground plus one story structure. However, 3D Metalcraft, owned by Rick Dodge, helped Storage Fox come up with a home run for their facility – A mezzanine constructed on the third level with materials that allowed the third level to be designated as a temporary demountable structure. Using ResinDek + 18 Gauge N Deck, they were able to construct the top floor directly over the interior load bearing walls without the need for extra steel joists.

“ResinDek panels were the absolute perfect solution for this site”, said Tommy Attonito, owner of Storage Fox. *“First, we got to increase our storage space by an extra 50%. Second, we saved \$5 per square foot in the construction process. That amounts to \$100,000 on this project, and that’s Real Money where I come from. Even better, we saved a significant amount of installation time in the process! We have a large project coming up in the next 18 months. If we can use ResinDek panels on all elevated floors, we can generate a savings of up to \$500,000 on that project. Savings of that magnitude are huge, and will create enough capital to help us start our next project even sooner!”.* Tommy Attonito, Owner of Storage Fox.

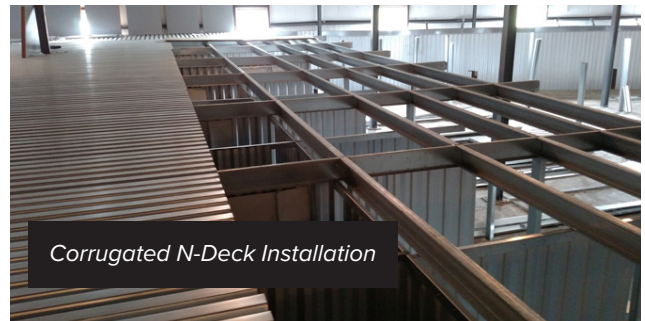


Success Story: Two Floors Built Simultaneously Using ResinDek® Instead of Concrete

Peter Ferraro, owner and developer of Tarrytown Self-Storage used ResinDek for the first time on an existing building he converted into a self-storage facility. The two story building had a footprint of 17,000 sqft. To maximize the rentable space, he raised the roof 8' to allow for the addition of the 3rd floor.

Mr. Ferraro stated, *“When I saw ResinDek I immediately realized the advantages of it. ResinDek panels provided a substantial savings in dead weight compared to concrete and can easily handle the load requirement of 125 psf. Had I gone with concrete on the 3rd floor I would have needed additional pilings and more steel in the support structure.*

However, for us an even bigger advantage is that ResinDek panels allowed us to build faster than we could have with concrete. We were able to build the 2nd floor and 3rd floor simultaneously, because we didn't have to wait for the concrete to cure. This allowed all of the trades to work on multiple floors at the same time, the electrician and the plumber could keep working, so everything flowed smoothly. As an added benefit the finish of the ResinDek panel has a nice color that reflects light well. Concrete has a tendency to crack. I definitely see the savings of time and money with ResinDek compared to concrete”.



Success Story: Self-Storage Company Saves Money by Building Up, Not Out

In 2003, Pacific Mini Storage wanted to expand their enclosed facility located just outside San Francisco, California. However, with the high cost land, traditional horizontal expansion wasn't feasible. So Pacific Mini Storage hired Cubic Designs to "go vertical" with the design and install a mezzanine directly above the existing storage units. This doubled the facility's size and revenue, as an additional 54,000 square feet of storage space was added. ResinDek panels, structural steel, and corrugated metal decking provided the ceiling for the first level and flooring for the second level.

13 Years in Service, ResinDek Panels on the 2nd Floor Still Look Great!

Since then, Pacific Mini Storage was acquired by Central Self Storage. In March of 2016, Cubic Designs went to visit the facility to make sure that the mezzanine was meeting all of Central Self Storage's needs. Christy, the manager at Central Self Storage, told Cubic Designs that she continues to be impressed with the mezzanine: *"as far as the comments on how the mezzanine has held up...fantastic! It was put together so well, everything seems so perfect. I have been here for almost seven years and I haven't found one thing that anyone could complain about"*. Cubic Designs is a strategic partner and stocking distributor of ResinDek floor panels, which are manufactured and sold by Cornerstone Specialty Wood Products, LLC®.

ResinDek floor panels have proven structural integrity and support live and dead pallet jack loads from 2,000 – 8,000 lbs. ResinDek panels can be easily installed without disrupting the occupied units below.





10-Year Product Warranty

ResinDek panels are warranted 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.



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