

resinDEK®

Manufactured by:



CORNERSTONE

SPECIALTY WOOD PRODUCTS, LLC®



◆ **ResinDek® Shelving System**

ResinDek® Shelving System

Manufactured by Cornerstone Specialty Wood Products, ResinDek Shelving System is a newly developed and designed shelving system that easily stores and supports case goods in a rack or shelving structure inside a warehouse distribution or manufacturing center. The ResinDek Shelving System consists of ResinDek horizontal shelving, ResinDek vertical dividers, steel or lumber supports, and when required vertical end stops. This system easily installs without hardware, and our ResinDek dividers are far superior to cardboard and is less expensive than steel.

ResinDek® Shelving System is Fully Customizable!

SHELF HEIGHTS	SHELF DEPTHS	VERTICAL DIVIDER SPACES
6" to 20"	8" to 60"	4" on center to 48" on center

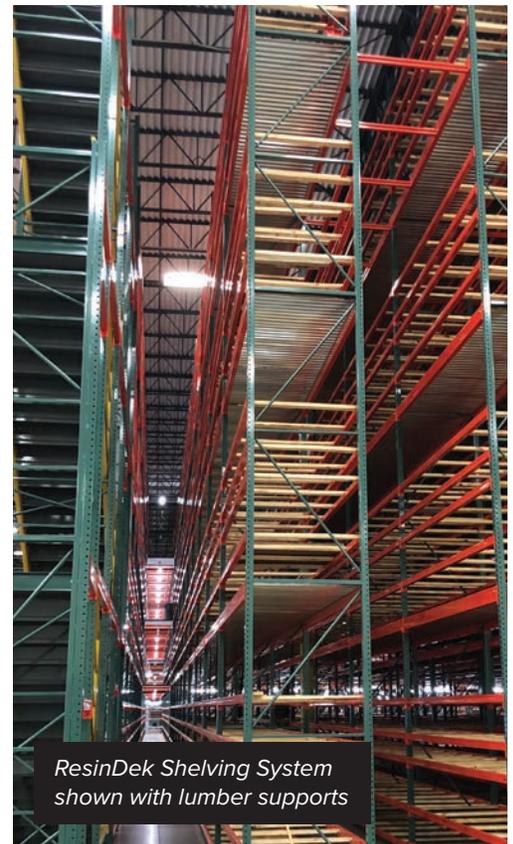
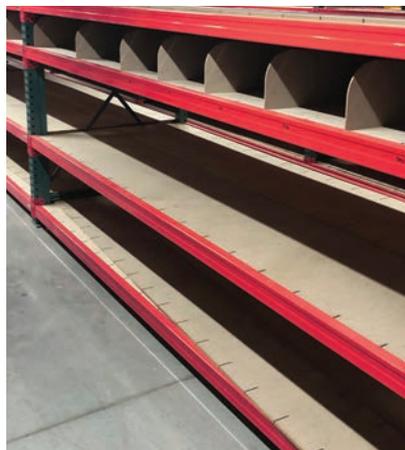
Through the utilization of custom machining, the ResinDek Shelving System can be designed to accommodate shelf heights of 6" to 20", shelf depths from 8" to 60", and vertical divider spaces from 4" on center to 48" on center. The custom machining allows for the possibility of the vertical dividers to be moved without the use of hardware, which provides a great deal of flexibility in the design of vertical divider spaces between shelves or within an individual shelf bay. If flue space is required then the single sided ResinDek Shelving System can easily fasten to the shelf supports to maintain proper flue space.

ResinDek Shelving System is custom manufactured using a proprietary blend of moisture resistant medium and high density fiberboard. It is available in single sided, double sided, with or without flue space. The panels may be unfinished as shown, or available with our Gray Diamond Seal® 2 finish. ResinDek horizontal shelving and vertical dividers come in thicknesses ranging from 1/4" to 3/4".

ResinDek Shelving System Lumber Supports

The lumber supports are manufactured in accordance with Southern Pine Inspection Bureau Standards. Cornerstone Specialty Wood Products furnishes a #2 grade stamped Southern Yellow Pine lumber support. The supports may have custom machining to accommodate unique site requirements, including notches to accommodate the height of a step beam and the horizontal shelving members.

The lumber supports have been tested extensively for this application. Load carrying capacity varies by length of support, but they have been proven to support up to 800 lbs each when the length is 48" or less. The ends of lumber supports can be screwed down to rack or shelving beams at their ends.



Independently Evaluated, Tested and Approved for Rated Load Capacity

RACK APPLICATION	P ULTIMATE	RATED AVG. CAPACITY
RESINDEK SHELVING SYSTEM 1/2" THICK		
30"	4,125 lbs	2,063 lbs
54"	4,733 lbs	1,027 lbs
RESINDEK SHELVING SYSTEM 3/4" THICK		
30"	4,756 lbs	2,306 lbs
54"	4,125 lbs	2,063 lbs



ResinDek Shelving System has been independently evaluated, tested, approved and received Seismic's **S Mark** through SMHE Inc., for its rated load capacity. Other loads and spans available upon request.



ResinDek Shelving System has been independently evaluated by IAPMO Uniform Evaluation Services, an internationally acclaimed body of independent structural engineers. After thorough and careful review, IAPMO has found the ResinDek Shelving System to be in compliance with Building Code (IBC) regulations, and can be installed in Types I-V Building construction, where it is not a structural part of the building as noted in table 601 of the IBC. IAPMO Uniform Evaluation Services United States ER number 467 and Canada ER number UEL 5027.

ResinDek Shelving System provides a safe, easy, economical and flexible configuration to rack and shelving units which allows for easy sortation, categorization, and identification of a large number of product SKU's. In addition, since this is considered part of the rack and not part of the stored product, it can usually be installed earlier than cardboard boxes, saving time and manpower.



ResinDek Shelving System Selected for Fire Code and Seismic Compliance

A financial company reached out to Jeff Andrews, President of Hammerhead Material Handling, for a new archival storage project in California's Inland Empire. As a Systems Integrator and solutions provider based in nearby Aliso Viejo, California, Andrews knew that finding the right storage system could pose a challenge. Andrews identified two areas of concern: fire codes and seismic requirements for storage.

"The project required us to design and engineer a solution that would create tens of thousands of linear feet of storage to hold paper files. The paper files would not be stored in a box and needed to be easily accessible," explained Andrews. *"However, the geographic location is considered a very high seismic area and paper is flammable, so we needed to find a solution that would also meet fire codes."*

To ensure maximum density, Andrews and his engineering team elected to take advantage of the existing facility's 35-foot-high ceiling by creating a three-level structure that would function similarly to a pick module. *"In order to design a three-level, 30-foot-tall rack system that could withstand the potential seismic forces from an earthquake, standard racking would need to be anchored to a 12-inch-thick concrete floor slab. In this building there was only a 6-inch slab."*

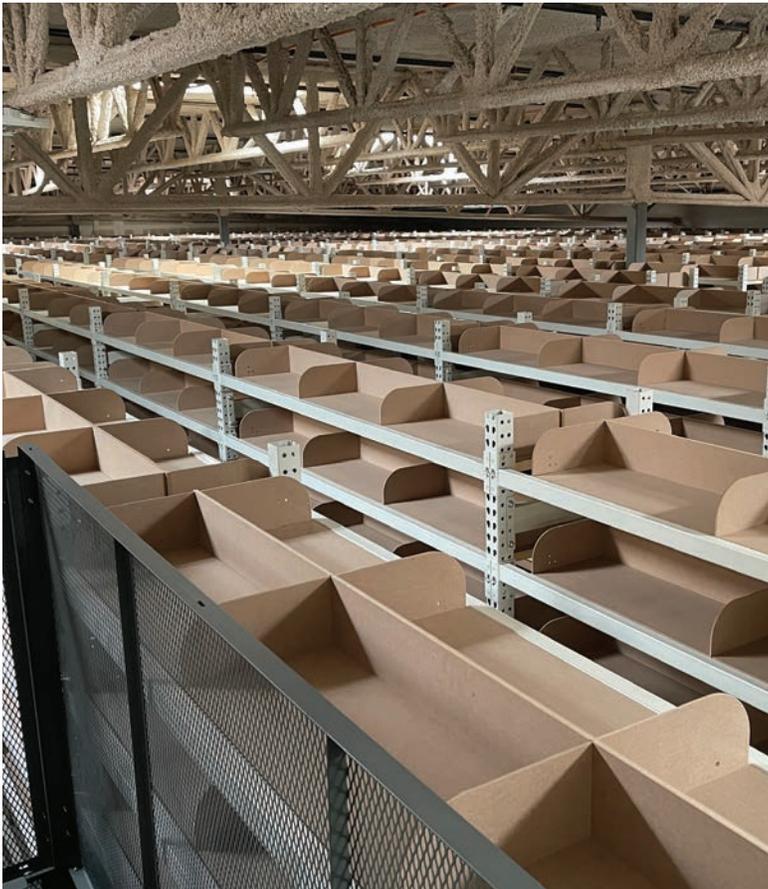


Comparing the Seismic Options: Steel Shelving vs. Rack-Based Storage

"Our customer specifically asked us to spec steel shelving units for this project. But we quickly figured out that standard steel shelving was too light duty; it would not support the volume of storage density needed to handle the level of records they wanted to store," he recalled. *"That meant we had to evaluate industrial steel storage rack."*

Andrews and his team investigated designing customized steel shelf inserts with dividers for each level of rack beam. Andrews explained that back panels were necessary for fire code shelving requirements. However, the most affordable custom shelving manufacturing options were overseas and to ship it at the most affordable rate the shelf inserts would need to be flat packed prior to loading into a shipping container. Upon delivery, the steel shelves would have to be assembled by hand, requiring four rivet screws per assembly, to secure the dividers to both a base and a back panel, thus adding both time and expense to the installation of the system.

Andrews began looking around for another option, he mentioned the project to Greg Doppler, President of Cornerstone Specialty Wood Products. The pair had worked together on numerous projects for over two decades, with Andrews specifying Cornerstone's ResinDek® engineered wood mezzanine flooring



Success Story: ResinDek® Shelving System for Rack Based Storage (cont.)

panels for numerous projects over the years. *“That’s when Greg told me about the new ResinDek® Shelving System, which offered many of the advantages of the steel option we were considering, but with some key differences,”* noted Andrews. *“The material cost was comparable, but the shipping and installation price was considerably less for the ResinDek Shelving System.”*

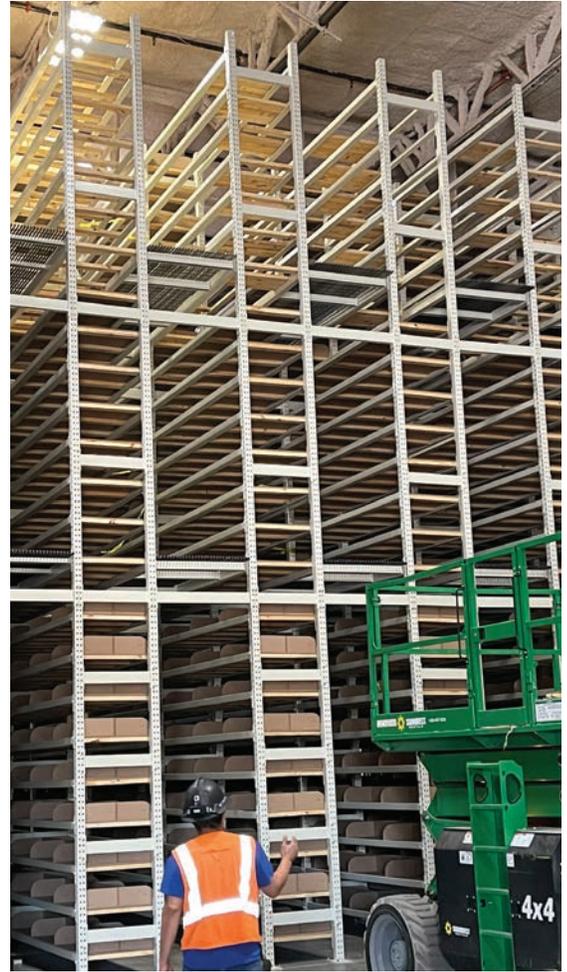
Andrews presented both shelving options to his customer and set up a demo so they could see how the two shelving options would work. “After comparing them both in terms of functionality, delivery and installation time, and overall cost, the customer determined that the ResinDek was the optimal choice,” said Andrews.

ResinDek Shelving System Delivers Fast Installation

With the ResinDek Shelving System selected, Andrews and his engineering team completed the rest of the storage racking design. Each level of the structure features ResinDek flooring panels upon which associates walk and push aluminum rolling ladder carts that they use to access the files. A vertical reciprocating conveyor located at one end of the structure lifts and lowers totes of pulled files for storage or retrieval. Employees access the different levels of the structure via stairs.

“The entire project came together much faster than we anticipated, thanks to how easy it was to assemble the ResinDek Shelving System,” noted Andrews. *“We had allotted four months for installation, mainly because we expected that it would take our installer’s crew a lot longer to put the shelves together. But instead, it took less than eight weeks.”*

“The customer was so pleased with the final result that they recently signed off on the design and installation of an identical system to be located in another portion of the same facility.” he concluded. *“The ResinDek Shelving System is a great product and perfect for what we needed. It is the perfect solution for our application!”*



ResinDek® Flooring Solution for Mezzanines and Industrial Platforms

ResinDek® flooring is the premier mezzanine flooring system designed for mezzanines, work platforms, pick modules, robotic platforms, and equipment storage. ResinDek panels are custom manufactured with engineering processes which enhance the functionality, durability, and life of the floor. They have the proven structural integrity to support dynamic and static rolling limits from 2,000 to 8,000 lbs.

ResinDek flooring panels have been independently evaluated and approved for use in Types I-V construction and as part of a fire-resistance rated assembly by the IAPMO Uniform Evaluation Services and is backed by a 10-year product warranty. The panels are available with a multitude of options that are customized for load capacities, required finish type, volume and type of traffic, including heavy rolling pallet jack loads and robotic traffic with AGVs and AMRs.



12020 Tramway Drive
Cincinnati, OH 45241
Toll Free: 888.755.3048 | Tel: 513.772.5560
Email: info@resindek.com | www.resindek.com

