

# Project Profile

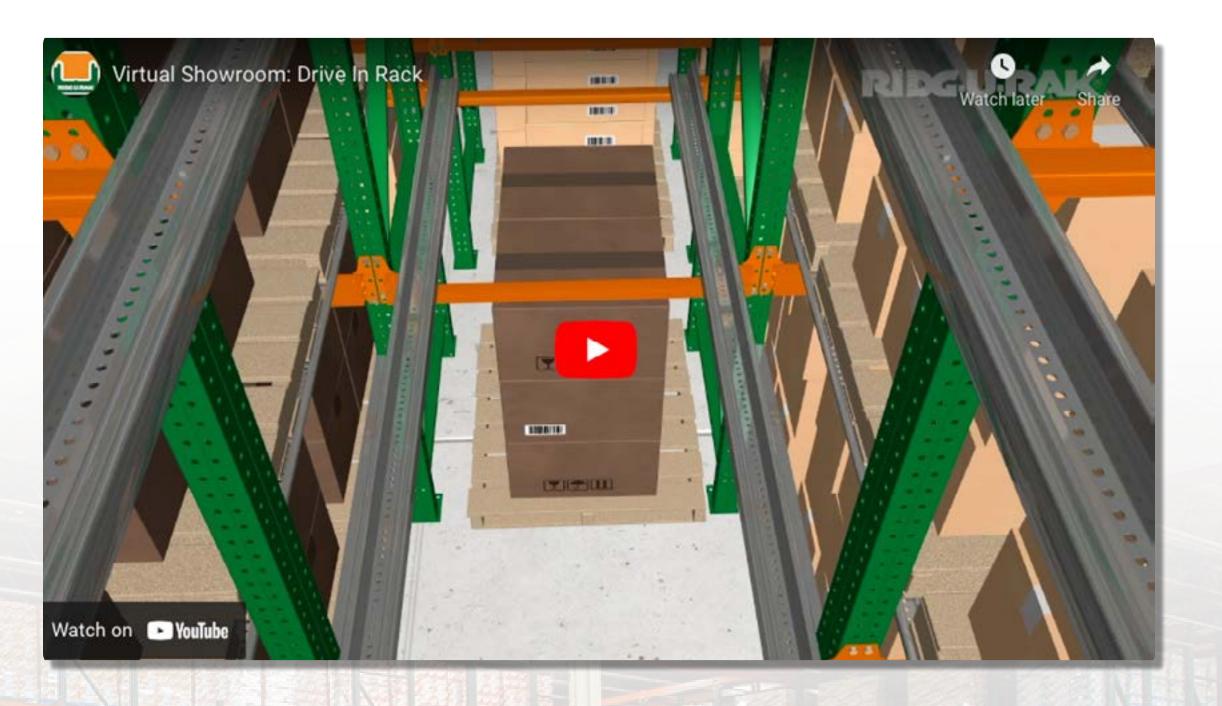
#### Columbian Logistics Network-Grand Rapids, MI

Operating more than 1.4 million square feet of ambient and temperature-controlled warehousing space, more than 50 trucks, and over 300 trailers to meet their customers' distribution and business strategy requirements. Catering to public and private warehousing and distribution needs of regional and national clients is the business of third-party logistics (3PLs) companies.

"We work with customers to determine their need for capacity, layout and flow, and develop solutions that control costs and optimize efficiencies, said Chief Operating Officer Jim Gadziemski. Our warehouse management technology provides visibility and control and allows for custom integration. Safety is one of our core values, and the integrity of our customers' products is part of that priority. Our facilities are SQF, AIB and Organic certified, and our dedicated Food Safety team has built HAACP based process into all of our standard operating procedures."

## Requirements:

The addition of another national retailer required a reconfiguration of the 15-acre, 500,000 sq. ft. warehouse on 36th St in Grand Rapids, MI with 20,000 total racked pallet positions. The facility is divided into suites with different ceiling heights and access points. The Columbian warehouse team worked closely with Progressive Handling to ensure their warehouse facilities and storage rack would be flexible and built to last as client requirements evolve.



"We have supplied various RIDG-U-RAK pallet storage rack systems to CLN for years, said Progressive's Daniel Boonstra. We specify heavy gauge uprights with column sentry in high traffic areas with high-capacity beams to ensure future use of all selective rack. It has paid off time and again as product rotation occurs our beams have the extra capacity to handle whatever they need to store."



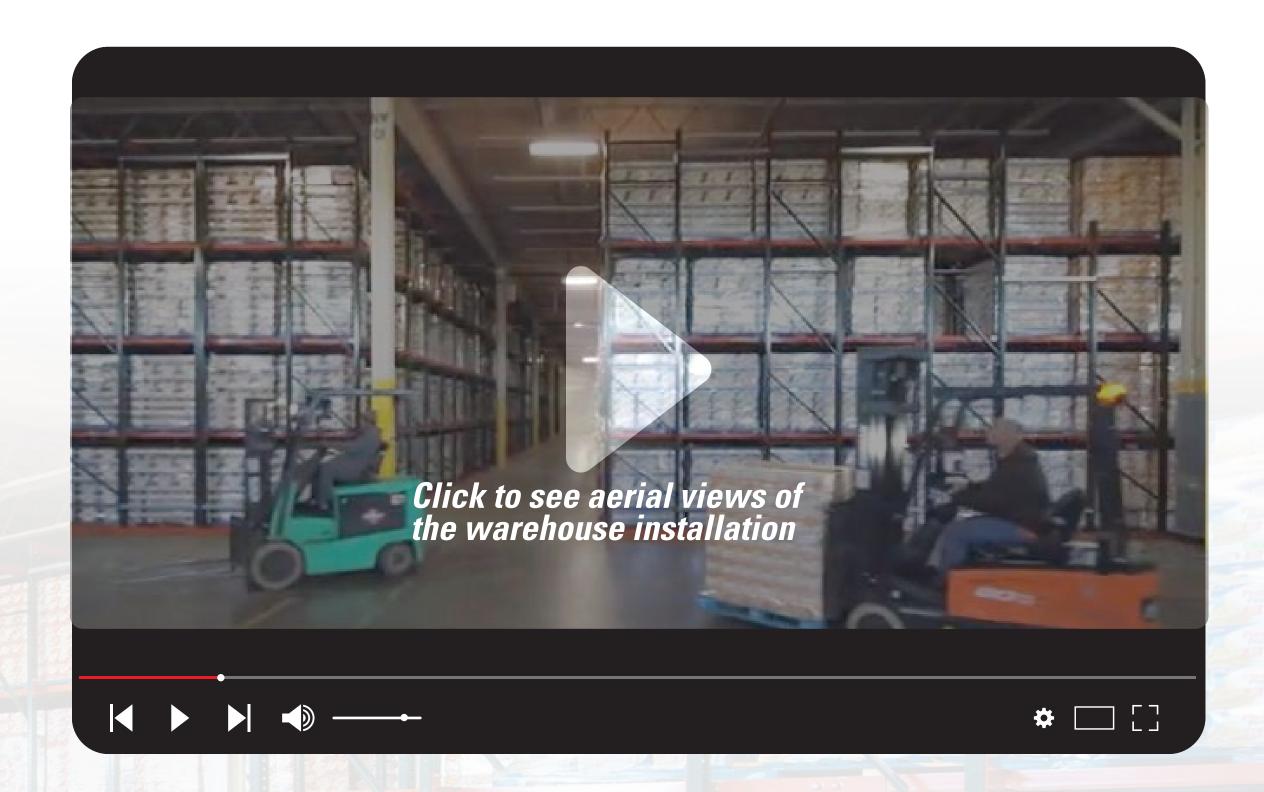
### Ridg-U-Rak Solution:

The 36th Street project included more than 10,000 pallet positions of high-density, back-to-back, six-deep drive-in storage rack located in a suite with a ceiling height of just under 22 feet. To best utilize the available space, RIDG-U-RAK's space saver rails were selected. Using the Space Saver rails allowed for an additional pallet position height gaining 25% more storage with just four-inches ceiling clearance.

The RIDG-U-RAK Drive-In pallet rack installed at Columbian uses roll formed uprights with the structural angle space saver rail system. Each of the 439 plus bays includes floor guides to minimize potential forklift damage while entering and exiting the 6 positions deep structure. Each upright has 36-inches of reinforced column sentry at the floor level for an additional safeguard against rack damage.

Columbian's storage and distribution plan for these products is a FIFO First-in, first-out operation. However, the unique shipment allocation of Truckload quantity made drive in rack systems the optimal choice for this customer to maximize storage density of high-volume food products with approx. 50 SKUs planned for this area. The product is packed on common size pallets with similar sized cartons.

The reconfigured space also includes an additional 10,000 pallet position of RIDG-U-RAK's Tear Drop 100% Selective Rack.













# Rolled Rail System -**Lift Trucks -**Provides superior strength and torsion Enter the storage system placing the resistance on heavy loads. load on the floor or on the pallet rails

# Ridg-U-Rak's Drive-In & Drive-Thru Storage Systems

#### Maximum Pallet Density Offers Numerous High-Strength, Durable Design Options

- Maximum Density Storage
- LIFO & FIFO Pallet Storage
- Easy Lift Truck Access

Drive-In rack is a high-density (LIFO) system best suited for last-in, first-out storage requirements. Drive-thru systems are similar to drive-in rack but can be (FIFO) accessed from either end and can be first-in, first-out.

These storage rack systems feature narrow pallet-storage lanes running perpendicular to the working aisles. Pallets are stored on the floor and on the parallel rails. Drive-In is a good choice for building inventories that ship periodically with low SKU items.

#### **Features:**

- Provides more storage space than standard pallet rack
- Fewer aisles required
- Lift truck accessible



**Space Saver Rail -** System shown above with optional slant back frames.



**Rolled Rail System** 



Optional Space Saver Structural Rail System

### Rail Systems & Uprights

#### Roll Formed Uprights & Rails





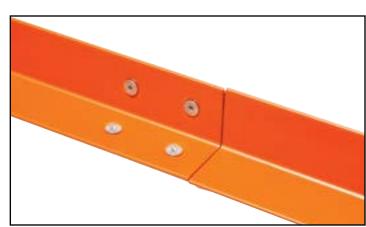


**Splice Arm** - Each end of the rolled rail is bolted onto a splice support.

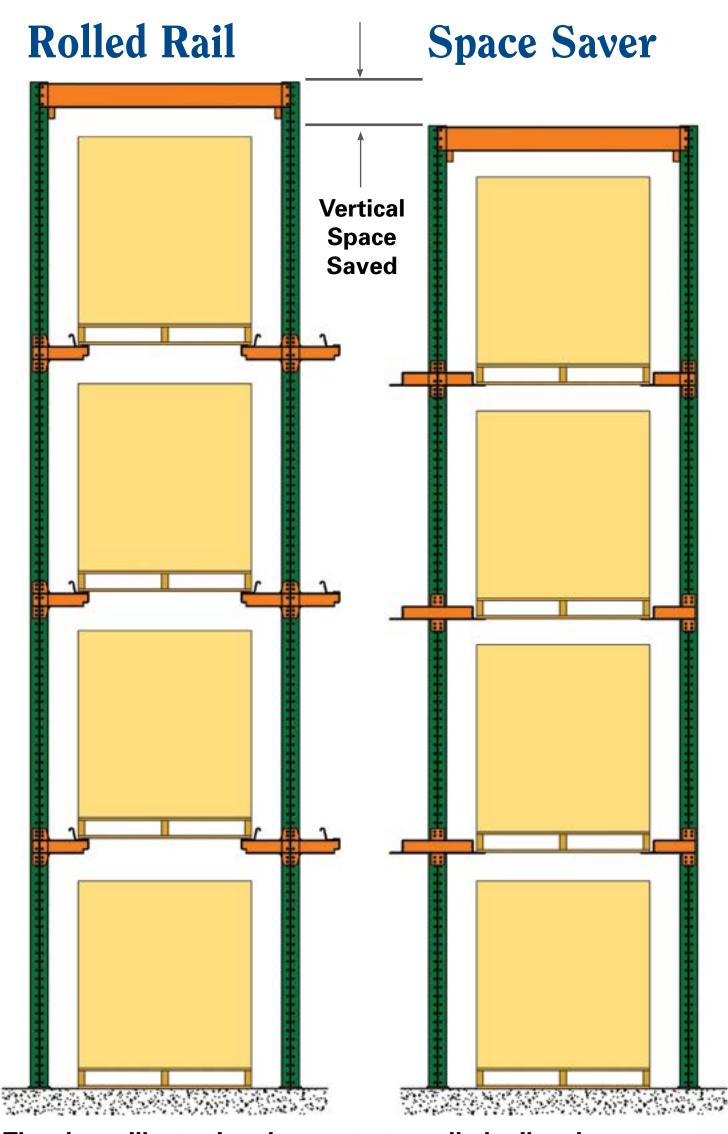
#### Structural Uprights & Rails







**Splice Connection** - Space Saver rail splices are achieved using 4 bolts. Rail support & arms for both systems are secured with grade-five hardware for maximum load carrying capacity.



The above illustration demonstrates rolled rail and space saver rail with the same number of pallet positions, exhibiting the vertical space differential for comparison

RIDG-U-RAK Drive-In Systems are available in roll formed or structural steel upright frames with rolled rails or space-saver structural rails.

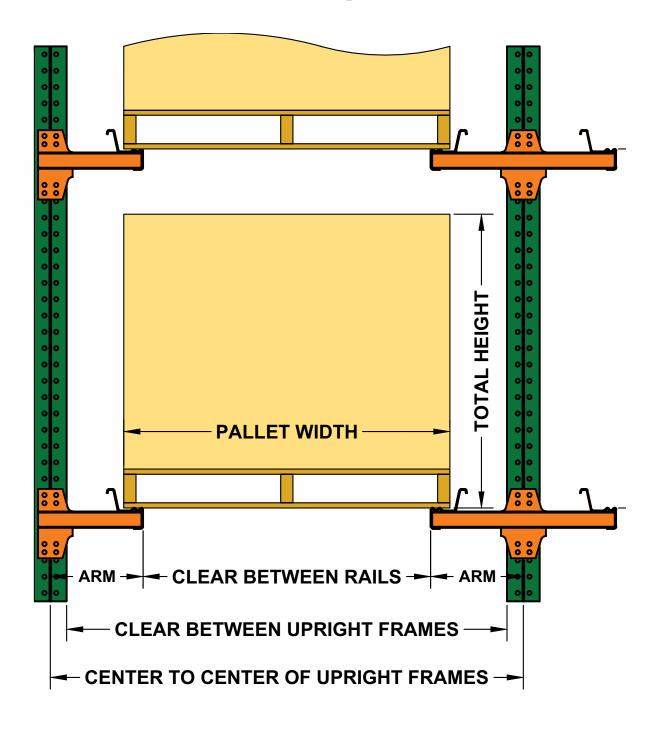
Roll Formed Rails - Provide maximum load capacity and low torsional rotation when fully loaded. RIDG-U-RAK's wide-base profile improves pallet placement and its galvanized finish resists abrasion often associated with Drive-In systems.

Space Saver Rails - Made of structural angle, this design maximizes the available vertical space. These rails reduce vertical clearance by 3"per pallet level.



# Design Considerations for Drive-In Layouts

#### Configurations & Dimensions Critical for Design



#### **Pallets**



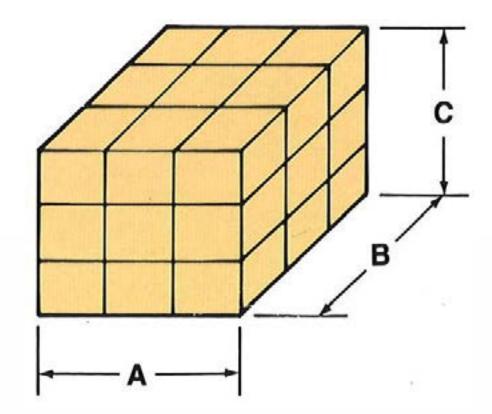
RIDG-U-RAK recommends adherence to the National Wooden Pallet and Container Association (NWPCA) guidelines for pallet design and specifications. Traditionally, the accepted standard has been the Grocery Manufacturers' Association (GMA) pallet.

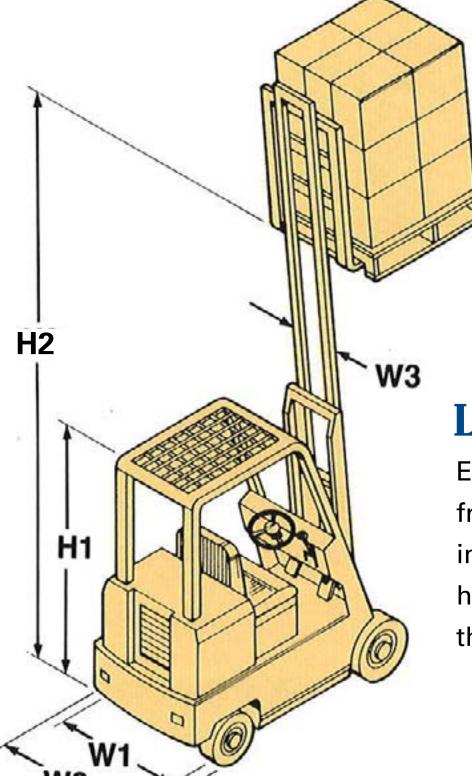
### The Grade A GMA Pallet Features:

- 7 boards on top
- 5 boards on bottom
- Average top deck spacing 2.5" to 3.5"
- 3 stringers (1-1/2" x 3-1/2"ea)
- 4 way entry
- Pallets must be in good condition

#### **Load Information**

As is the case with strict adherence to pallet specs, it is important to consider the load width, depth, height and weight to design the Drive-In system.





#### **Lift Truck Information**

Ensure the lift truck can fit between the upright frames and can pass between the rails. It is also important that the lift truck has sufficient lift height to reach the highest rail level and has the capacity to lift the load safely.

RIDG-U-RAK's distributor, **Progressive Handling**, **Inc.** located in Allendale, MI, began work on the warehouse expansion project with Columbian Logistics three years prior to the installation. Columbian contacted Progressive Handling to help determine the most efficient pallet rack storage systems to install based on the new customer's delivery and storage needs. The mission included the need to maximize pallet positions given the the physical space limitations.

Progressive Handling, Inc. has been a partner with Columbian Logistics Network for over 25 years. In addition to pallet rack systems, PHI also provides pallet rack damage inspections, conveyor and packaging systems.



#### Progressive Handling, Inc.

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For more information about RIDG-U-RAK's high density pallet rack storage systems, visit <a href="https://www.ridgurak.com/products/high-density-pallet-rack/">https://www.ridgurak.com/products/high-density-pallet-rack/</a>



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