

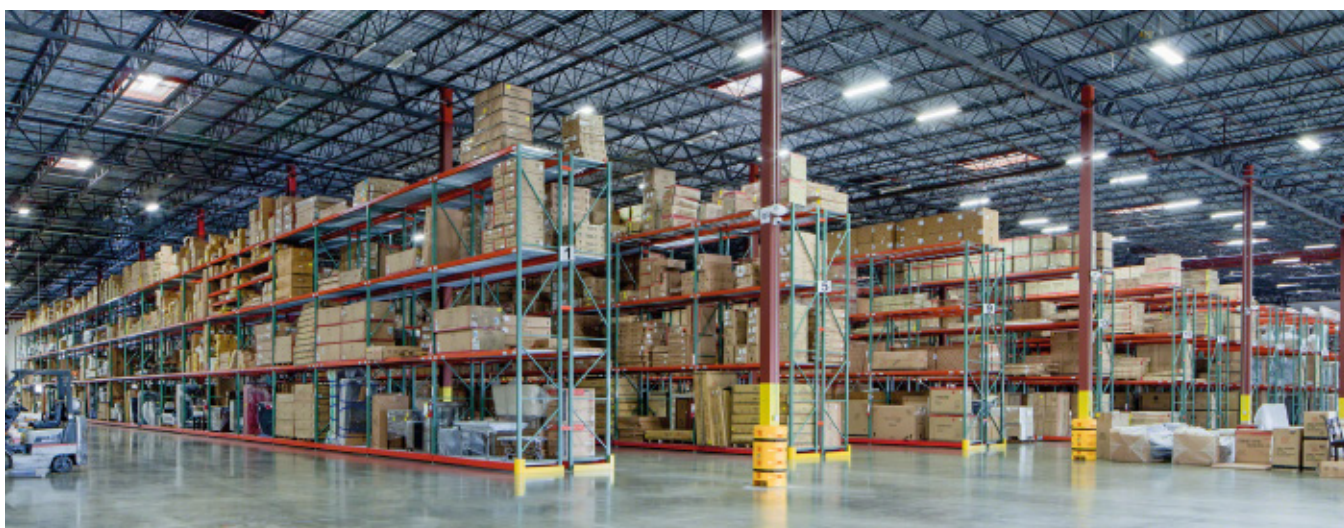
**Case study: Rana Furniture**

Not just part of the furniture: narrow aisles and pallet racks equal productivity at Rana Furniture

Location: USA



The new warehouse Rana Furniture, a home furnishing and decor business, owns in Miami (Florida) features selective pallet rack storage with narrow aisles from Interlake Mecalux. Thanks to this solution, the company has access to a storage capacity of 7,656 pallets, meaning it can keep growing and opening up new points-of-sale in the US in the foreseeable future.



### About Rana Furniture

Opening its doors in Miami in 2003, Rana Furniture is a company that distributes the most popular brands of furniture and home decor products on the market. It manufactures its furnishings in the US, Latin America, Canada, China and Indonesia.

Innovation is in the company's DNA, meaning it is continually evolving with the styles demanded by customers. In the last few years, this approach has translated into expansion, taking the company from a single storefront in a Miami shopping mall to the grand opening of seven stores in south Florida.

### Rana Furniture's needs

Rana Furniture's new central warehouse, located in the south of Florida, is the launching pad for business operations. Its mission is to supply furniture to all the distribution points it owns and operates as swiftly as possible.

Rana Furniture sought out the collaboration of two companies who are experts in logistics solutions, namely Interlake Mecalux (IKMX) and Atlantic Rack, to set up a storage system that would best suit this central distribution center. Its main prerequisite was that, apart from capacity, this solution would streamline manual product picking.

The warehouse is equipped with pallet racks with narrow aisles. The surface area of the warehouse is fully used, achieving a higher storage capacity.

Plus, a tremendous variety of furniture of different sizes and volumes can be accommodated in the racks.

Cantilever racks are the first choice when you go about storing furniture.

Nevertheless, Rana Furniture specifically needed pallet racks due to security considerations, to prevent and protect the warehouse against fire hazards.



### Characteristics of the storage system

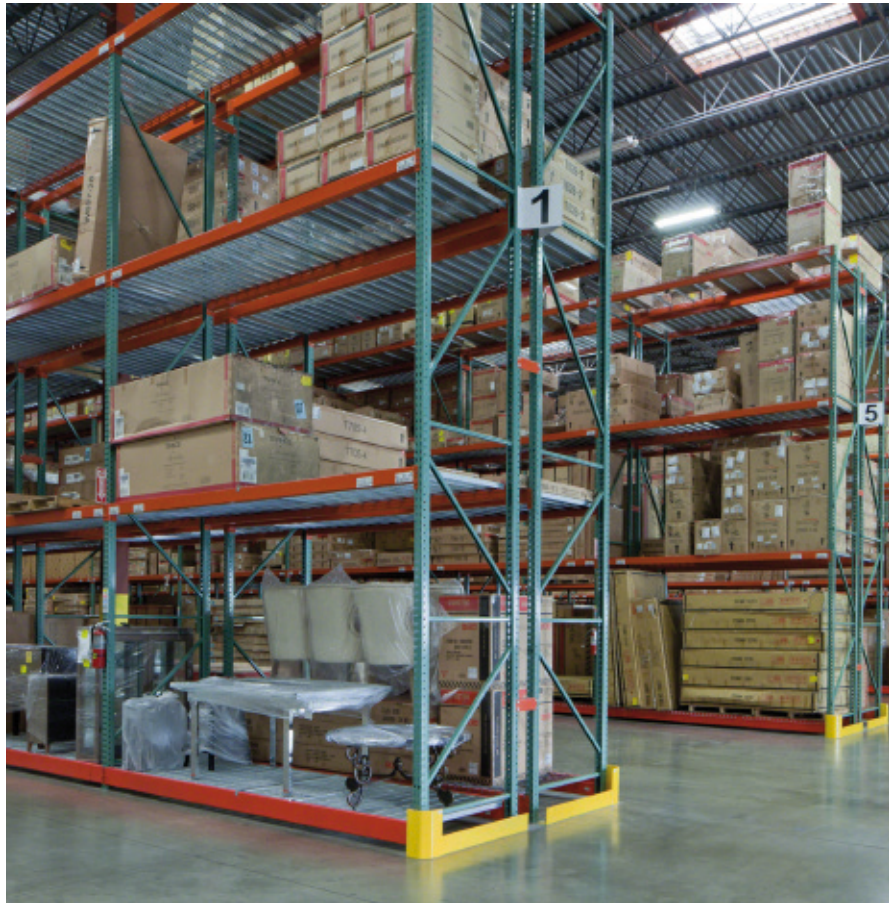
The warehouse is equipped with 22' high selective pallet racks that, overall, provide a storage capacity of 7,656 pallets.

The products are sorted according to their characteristics and turnover. Goods organized in this way has let the company streamline storage and order prep work.

There are nine narrow aisles: eight of these are 5.9' wide and the other, 7.9' wide. The workers operate forklifts that run along guide-wires inside these aisles. This model uses a wire embedded in the floor that produces a magnetic field detected by the machine, which leads the equipment.

The wire-guided machines circulate centrally through the aisle, averting impacts to the rack structure and the goods.

Five wider storage aisles were also enabled, of 18', that facilitate smooth, speedy handling by operators. The largest pieces of furniture, such as sofas, are deposited in racks set up on both sides.



## Direct access to the different SKUs of Rana Furniture eases tasks related to storage and order fulfillment



### Getting orders ready

The warehouse is designed to speed up its main operation: order picking. Operators use order picker machines at heights to handle goods and collect products directly off the shelves that comprise each order.

This type of equipment includes an onboard cabin where the operator works from and that can raise and lower with the load. Boxes are set on the pallets by operators and, once the orders are finished, they are moved to the consolidation area.

Operators crisscross the warehouse gathering the SKUs for each order manually. Optimized inventory placement stops more than one worker from being in the same picking aisle at once. Rana Furniture also has achieved fully manual product handling, reducing all odds of damage to the furniture.



**Hector Rueda**  
Operations Manager

*“The new racking is minimizing damage to the product a lot and it’s also boosting productivity. Before, workers used to be able to prepare one truck in maybe an entire day. Now, the same worker prepares three trucks.”*



### Advantages for Rana Furniture

- **Top productivity:** the warehouse's design and the allocation of the goods mean workers are able to put orders together faster.
- **Safe and sound:** goods handling (both picking and storage tasks) is manual, which stops merchandise from sustaining any type of damage.
- **Full usage of warehouse surfaces:** the racks maximize space at heights and the building's floor area. By doing so, there is better storage capacity without losing direct access to the SKUs.



### Technical data

Storage capacity	7,656 pallets
Pallet size	40" x 48"
Rack height	22'
Number of levels	4

