The Advance ASP Structural rack is used extensively in applications where durability and impact resistance are required.

The applications are limitless:
- Selective
- Pushback
- Double Deep Reach
- Drive In
- 2Wide Drive In
- Pallet Flow
- Pick Modules
- ASRS / High Bay
- Grocery
- Food & Beverage
- Cold Storage

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<th>Structural Rack</th>
<th>Roll-Formed Rack</th>
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<td>Abuse Resistant</td>
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ASP structural steel pallet rack systems provide durability and resistance to abuse. Our structural rack is ideal for high-volume, heavy throughput applications.

Compared to roll-formed rack, structural steel construction is heavier, with reinforced channel corners and thicker steel columns. Structural racks withstand far greater impact than roll-formed racks (a significant safety advantage). Greater durability translates into longer life and reduced need for maintenance, resulting in lower costs over the long term. If damaged, most structural racks may be repaired on site with no downtime.

If you want a rack system that will hold up to years of hard use, buy Advance ASP.

The Advance ASP Structural rack is painted with a durable, high quality baked enamel finish, formulated specifically for the rigors of the warehouse environment. Eight standard colors are available.
Single Selective

This is the most common style of rack system. It is low cost, readily available and provides access to every pallet. The downside is that nearly 50% of the facility is dedicated to aisle space (typically 9-12’) and density is sacrificed.

Pushback

A pushback system can provide from 2-6 deep storage, significantly increasing density. Pallets are placed on carts located on a sloped rail system and “pushed back” by the lift truck operator. When removed, gravity brings the pallets back to the aisle. Pushback systems can increase density up to 75% when compared with a selective system.

Double Deep Reach

Double deep is another variant of selective rack where two racks are stood back to back and the rear pallet is accessed by a specialized lift truck with a pantograph that extends into the back of the rack. Double deep can increase warehouse capacity by as much as 72% based on (10) 132” selective aisles. Pallets should be stored in pairs with the same product in both the front and back position.

Drive-In

Drive-In rack is another high density storage option in which the lift truck drives inside the storage rack and places the pallets on load rails. Drive-In systems can range from 2 all the way up to 20 pallets deep. The systems are relatively inexpensive, but are limited due to lack of selectivity, low productivity and susceptible to damage. Used for Cold Storage, Food & Beverage and Grocery applications with limited SKU counts, limited product variation, date segregated production or batch production.
Pallet Flow

In a pallet flow system the pallet is placed in the rear of the system on a series of rollers, typically with a centrifugal braking system. The pallets roll forward by gravity to the front of the system providing FIFO storage. Pallet flow systems can range from 2-30 deep and provide very high density storage. They are typically the most expensive option, require good quality pallets and require more maintenance.

Carton Flow

Carton flow storage racks are used for low volume case picking and for high volume split case picking. Cartons are loaded individually at the back side of the rack system and flow to the front (FIFO - First In First Out). Carton flow racks can be installed as stand-alone units or as a component of a larger pallet rack or pick module application.

Pick Module

Pick Module pallet racks are designed for high-volume applications and are the perfect industrial storage solutions for full and split case picking. Our Pick Modules can be stacked 3-4 levels high, often with conveyors integrated to the rack system. Modules will often incorporate carton flow, pallet flow, pushback and other combinations for custom material handling.

Pick Tunnel

High-volume single level picking operations can benefit from Pick Tunnels pallet racking systems because they provide superior warehouse storage density and cubic space utilization. Reserve product is stored over the picking aisle in pushback or pallet flow and fed by lift trucks to the picking lines using either pallet flow or carton flow.

ADVANTAGES

- High Density Storage (25+)
- Very Efficient Pick/Unload
- Direct Access to Each Pallet
- FIFO Inventory Flow
- High Selectivity
- Fast Operation
- LIFO Inventory Flow
- Handle High SKU Count
- Split Case Picking
- Very Efficient Picking Rates
- Full Case Picking

INDUSTRY APPLICATIONS

- GROCERY
- CONSUMER GOODS
- MANUFACTURING GOODS

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Foot Plates
Standard Foot Plates are punched with (2) 5/8” holes to accommodate (1) or (2) 1/2” anchors. Other foot plate configurations are available.

Heavy Bottom Horizontals (part no. HBH)
Heavy Bottom Horizontals will significantly reduce damage to uprights caused by forklift impact.

Angle Column Protector (part no. AP-L)
Column protectors are used to reduce damage to the front of the upright from fork lift impact. The protectors are constructed from 1/4” heavy duty structural angle. Dust caps are standard.

Cross Bars
Cross bars are typically used to help prevent misplaced pallets from falling between the load beams. The addition of cross bars will also increase beam capacity and reduce spreading. Standard construction is from high strength 2” x 2” x 1/8” structural angle. “L” is equal to upright frame depth.

| XB | XB designates this is a Cross Bar assembly (XB, XBW, XBR) |
| L  | Material Size: 1 = 1-1/2” x 1-1/2” x 1/8”, 2 = 2” x 2” x 1/8” |

Row Spacers
Row Spacers are used for typical frame to frame spacing. Frame Spacers must be used with frame to post connections.

| RFS | RFS/W designates this is a Row / frame Spacer assembly |
| L  | Frame Size (RFSW only): A = 3”, C = 4”, E = 5” |
| L  | Material Size: 1 = 1-1/2” x 1-1/2” x 1/8”, 2 = 2” x 2” x 1/8” |

Rub Rails
Heavy duty rub rails are used for deep storage systems to protect uprights against forklift damage.

| RR | RR designates a Rub Rail assembly |
| L  | Channel Size: A = C3 x 3.5, B = C3 x 4.1, C = C4 x 4.5, D = C4 x 5.4 |

Impact Protection

Doubler
Doubler
Doubler is frequently provided in the aisle “impact zone” to reduce damage from forklifts. Doubler are also used to increase column capacity for heavily loaded uprights.

Bullnose Column Protectors (part no. BP-L)
Bull nose column protectors are used in high tempo applications with severe forklift impact. A bull nose protector allows a 3/4” anchor to be installed in front of the upright column to significantly strengthen the connection to the slab.
Advance Storage Products manufactures engineered to order structural pallet rack systems. Started in 1958 in Southern California and still family-owned today, Advance has become a leading structural rack system producer, serving customers in the US and abroad. With a long history of innovation, Advance offers turnkey systems from purchase through installation:

- Engineering and design excellence
- P.E. stamped calculations to current IBC and seismic requirements
- Approval and As-Built drawings
- Rack protection and safety enhancements
- Industry leading warranty

Advance manufactures over 100,000,000 lbs. of structural rack solutions per year, routinely shipping projects in excess of $5,000,000. ASP production facilities are state-of-the-art pallet rack system manufacturing facilities located in Cedartown, Georgia and Salt Lake City, Utah. Advance produces nearly half of the pushback systems sold in the US and offers all types of long-lasting structural pallet storage systems from static selective rack to dynamic, high-density systems as well as supported order fulfillment structures including pick and flow systems.

**MANUFACTURING LOCATIONS**

Salt Lake City, Utah

Cedartown, Georgia

Advance is proud to be a member of these organizations: