

QuickSpec SELECTIVE PALLET STORAGE RACKING

1. Load Characteristics

What type of load is being stored: Standard Pallet, Wing Pallet, Skid, Steel Frame, Wire Basket, Gaylord, etc. What is the Width (left to right), Depth (front to back) and Height (floor to top) of the whole unit load? What is the maximum weight for each load and how many unit loads will be stored on each shelf?

Two loads across a beam are common for standard 40" wide x 48" deep pallets.

2. Determine Horizontal Beam Length

Multiply number of loads across each shelf by the maximum width of the loads (Include product that overhangs wide). Then add 4" between loads and 3" to 4" between the load and the upright frame on each side. So, for 2 pallets @ 40" wide, you would have: $80" + 4" + 4" + 4" = 92"$. This would be the minimum recommended beam length.

3. Determine the Capacity per Pair of Beams

Multiply number of loads across each shelf by the maximum weight of the loads. This is the minimum capacity per pair of beams. Note that all capacities are for evenly distributed loads. A concentrated load in the center of the beam requires a different calculation. Consult your local dealer.

4. Determine the Upright Frame Depth

Typically, subtract 6" from your pallet depth. This allows for pallet overhang in the front and rear of the rack for easier placement of a pallet. For a 48" deep pallet: $48" - 6" = 42"$ deep rack upright. There may be situations where full pallet support is indicated and a different rack depth is required. Consult your local dealer for more details.

5. Determine the Upright Frame Height

Multiply the number of pallets high minus 1 pallet x 10". This allows for the beam face and room to lift the pallet. Then multiply the number of pallets high minus 1 pallet x the maximum load height. Then add the two numbers. For 4 pallets high: $4 - 1 = 3 \times 10" = 30"$. For 50" overall load height, $4 - 1 = 3 \times 50" = 150"$. Upright height = $30" + 150" = 180"$ (15'). Consult your local dealer for standard upright sizes.

6. Determine the Upright Frame Capacity

Upright frame capacity is determined by two factors: total load capacity of each section (bay) and the maximum unsupported span from floor to first beam or from beam to beam in each section of racking. Total the load capacity of all beam levels in a bay. Then find the largest pallet opening in the bay. This is usually from the floor to the first beam, but could be a beam to beam dimension above the floor. Consult your local dealer to determine the appropriate frame style that satisfies both figures. In some areas, additional capacity or reinforcements will be required to satisfy seismic requirements.

7. Consider Optional Equipment

There are several equipment options that will enhance the stability or protect the rack from damage.

- ✓ Shim Plates – Used to level/plumb uprights during installation
- ✓ Anchor Bolts – Fasten upright frame legs to the floor
- ✓ Wall Spacers – Connect upright frames to the wall
- ✓ Row Spacers – Connect back-to-back rows of rack together
- ✓ Post Protectors – Bolt to floor in front of upright to reduce impact damage
- ✓ Wire Rack Decks – Drop on top of beams to provide full support for misplaced or smaller pallets

For questions or help with Pallet Storage Rack Applications:

**Call Preferred Equipment Resource at 800-711-8698,
e-mail us at: info@prefEQ.com, or visit our website: www.prefEQ.com.**