

# Steel Storage Racking

## Adjustable pallet racking — uprights, beams and bracing

Roll-formed uprights, step beams and bracing for adjustable pallet racking. The upright and beam are the roll-formed members; the load a bay can carry comes from the design of the whole frame, not from the section on its own.

### Members

| Member           | Typical form                                                                                |
|------------------|---------------------------------------------------------------------------------------------|
| Upright (column) | Slotted roll-formed section, punched on a regular pitch for beam levels                     |
| Beam             | Step beam or box beam; the step keeps the pallet in place                                   |
| Bracing          | Horizontal and diagonal bracing between uprights, plus frame bracing in the depth direction |
| Accessories      | Footplates, row spacers, protectors, decking and safety clips                               |

### What has to be designed

|                   |                                                                                                                                               |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Design basis      | The rack is designed as a structure — EN 15512 in Europe, AS 4084 in Australia/New Zealand                                                    |
| Accidental impact | Both codes require the design to withstand a specified horizontal impact on the upright — AS 4084 uses the greater of unit load/15 and 0.5 kN |
| Tolerances        | Erection tolerances matter to capacity; they are part of the standard, not a site preference                                                  |
| Finish            | Pre-galvanised or powder-coated, selected with the environment                                                                                |

Capacity figures are per system and per design — never quote a bay load from the section alone. Tell us the pallet load, bay height and level count and we will confirm the frame.

### Standards referenced

EN 15512:2020+A1:2022 (steel static storage systems — adjustable pallet racking systems, principles for structural design) · ANSI MH16.1-2023 (design, testing and utilisation of industrial steel storage racks — the North American standard, referenced by the International Building Code) · AS 4084:2012 (steel storage racking, Australia / New Zealand) · EN 10346 (coated steel, e.g. Z275) · cold-formed member design to EN 1993-1-3 / AISI S100

**Need a quote?** Send pallet size and weight, bay height, number of levels and the code your project designs to.

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