



The Mobile Robot Company

Knowledge Center — Approved Loads and Pallets · 2026-08-04

<https://info.mobilerobot.com/safety-compliance/safe-deployment/approved-loads-and-pallets>

Approved Loads and Pallets

The J1600 moves pallets and other forkable load carriers within a defined envelope. This page sets out the limits and the judgment calls that remain with the operator.

The open-base requirement

The J1600 requires an **open-base carrier with no bottom deck board** so its forks can enter. Fork geometry: 1,150 mm long, 180 mm wide, 60 mm thick, with 680 mm outer and 320 mm inner fork distance.

Load envelope

Parameter	Limit
Maximum rated payload	1,600 kg / about 3,500 lb
Maximum pallet/load length, including overhang	1,250 mm / 49 in
Maximum pallet/load width, including overhang	1,250 mm / 49 in
Maximum load height from floor	1,700 mm / 67 in

The exact maximum envelope is 1,250 mm; some shorter product summaries round it to 1.2 m.

Supported carrier types

Carrier	Support
EPAL Euro Pallet	Supported
EPAL 3	Supported
EPAL 6	Supported
GMA pallets	All GMA pallets with an open base
Custom carriers	Any forkable open-base carrier within the size limits

Beyond standard pallets, demonstrated examples include [open cages and barrels](https://info.mobilerobot.com/applications/use-cases/open-cages-and-alternative-load-carriers/) (<https://info.mobilerobot.com/applications/use-cases/open-cages-and-alternative-load-carriers/>). Compatibility depends on base geometry, size, stability — and operator judgment.

Where judgment applies

[Pallet pickup is always manual](https://info.mobilerobot.com/applications/scenarios/manual-pickup-and-autonomous-delivery/) (<https://info.mobilerobot.com/applications/scenarios/manual-pickup-and-autonomous-delivery/>), which keeps a person's assessment in the loop for exactly the cases that need it: damaged pallets, top-heavy or leaning loads, loose shrink wrap, and [sensitive or unstable goods](https://info.mobilerobot.com/applications/use-cases/sensitive-or-unstable-loads/) (<https://info.mobilerobot.com/applications/use-cases/sensitive-or-unstable-loads/>). Manual mode also allows picks and drops at up to 1,600 mm, while autonomous delivery is at floor level. See [Operator responsibilities](https://info.mobilerobot.com/safety-compliance/safe-deployment/operator-responsibilities/) (<https://info.mobilerobot.com/safety-compliance/safe-deployment/operator-responsibilities/>).

NO BLANKET APPROVAL

There is no blanket approval for every carrier or for hazardous materials. Assess non-standard carriers and critical loads case by case as part of the [site risk assessment](https://info.mobilerobot.com/safety-compliance/safe-deployment/site-risk-assessment/) (<https://info.mobilerobot.com/safety-compliance/safe-deployment/site-risk-assessment/>).

Related pages

- Load detection is a monitored safety function: see [Load detection](https://info.mobilerobot.com/safety-compliance/safety-functions/load-detection/) (<https://info.mobilerobot.com/safety-compliance/safety-functions/load-detection/>).

- Full vehicle dimensions and specifications: [J1600 technical specifications](https://info.mobilerobot.com/products/j1600/technical-specifications/) (<https://info.mobilerobot.com/products/j1600/technical-specifications/>).