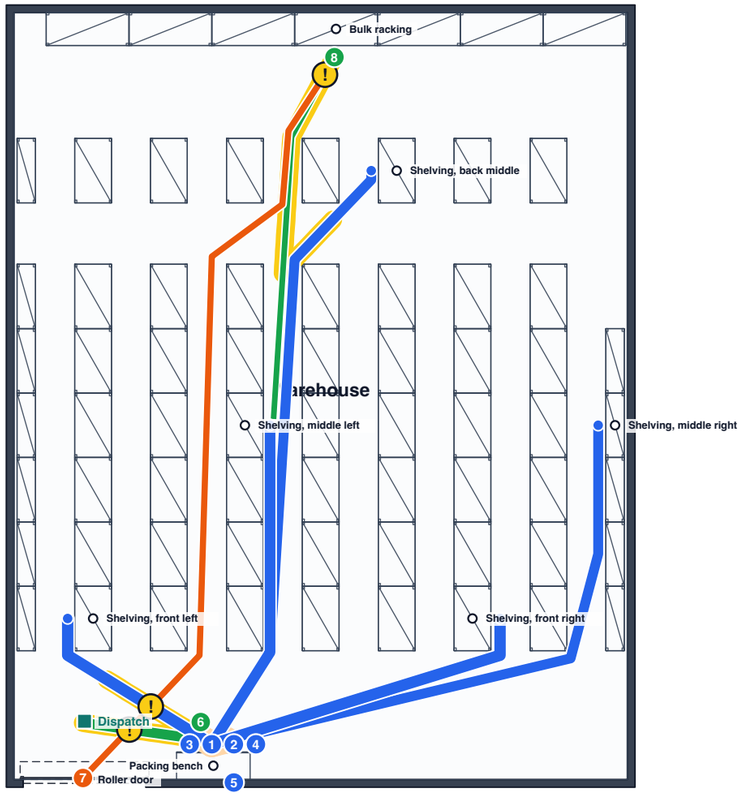

N

0 10 m

SPAGHETTI DIAGRAM

Legend

- On foot
- Pushing a trolley
- Pallet jack
- Thicker: more trips a day
- Busiest ways
- People on foot share the way with vehicles
- Where their paths cross
- Station

Trips

No.	Trip	One way	A day
1	Pick run: front left On foot, 14 a day by 3, there and back	6.7 m	7.8 min
2	Pick run: middle left On foot, 12 a day by 3, there and back	11 m	11 min
3	Pick run: back middle On foot, 10 a day by 3, there and back	20.3 m	16.9 min
4	Pick run: front right On foot, 14 a day by 3, there and back	11 m	12.9 min
5	Pick run: middle right On foot, 10 a day by 3, there and back	19.8 m	16.5 min
6	Cartons to dispatch Pushing a trolley, 30 a day, there and back	4.2 m	4.7 min
7	Goods in to the racking Pallet jack, 8 a day, there and back	26.5 m	8.1 min
8	Restock: racking to middle left Pushing a trolley, 6 a day, there and back	12.4 m	2.7 min

Every day: 1 h 21 min

A year (250 days): 336 hours, 1377.4 km, $15,118

Lean wastes

Motion: people moving: 271 hours a year, $12,193

Transport: moving goods: 65 hours a year, $2,925

People on foot come within a metre of a pallet jack's way for 16.2 m, and cross its path in 3 places: Pick run: front left with Goods in to the racking; Pick run: back middle with Goods in to the racking; Cartons to dispatch with Goods in to the racking.

The busiest way (about 2 m of it) carries 420 passes a day (Pick run: front left, Pick run: middle left, Pick run: back middle and more): keep it clear and wide enough.

Safe Work Australia's Traffic management: guide for warehousing says keeping people on foot and forklifts apart is the most effective way to prevent forklift injuries. Where they must share, look at the layout, barriers, marked walkways, speed limits and exclusion zones.

Distances are along the shortest way round what's drawn, at average speeds (on foot 1.2 m/s, a trolley 0.9 m/s, a forklift 2.2 m/s, unless you set your own). A starting point for planning: a time and motion study on the floor is what counts.

Spaghetti diagram

Warehouse walk times

Client: Sample warehouse (made up)

Daily trips as drawn in Walk times: the shortest way round what stands on the floor, at average speeds.

Drawn	Rev	Sheet	Scale
		W101	Scale 1:200 @ A3

26/11/2026 · metres

Drawn with Plotlay