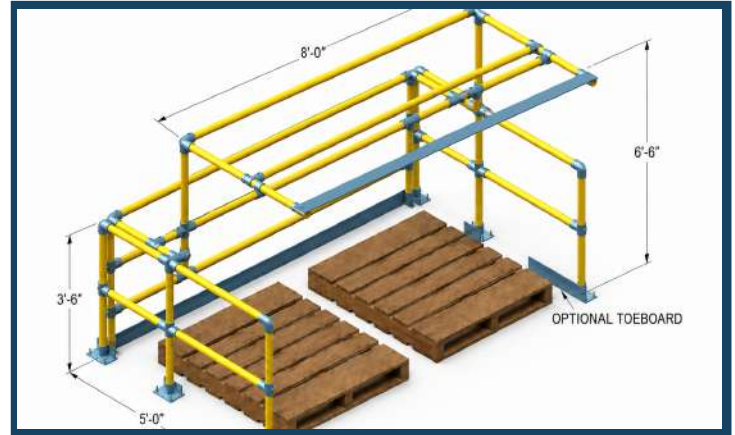


PALLET SAFETY GATE SYSTEM

42 OD TUBE

- 1 Retro-fit with existing 42 OD guardrail
- 2 Balanced pivot for single operator use
- 3 OSHA-tested passive Level 2 protection



OVERVIEW:

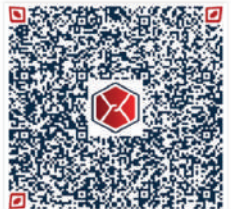
The Pallet Safety Gate is a modular fall-protection barrier engineered for mezzanine-level openings where palletized goods are transferred between floor levels. The system is constructed from 42 OD tube sections joined with mechanical pipe fittings, requiring no on-site welding. The gate incorporates a balanced pivot mechanism that allows a single operator to open and close the barrier smoothly while a pallet is being handled. When integrated with existing guardrail installations, the system provides a compliant passive (Level 2) fall-protection solution in accordance with the Hierarchy of Fall Protection.



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PALLET SAFETY GATE SYSTEM

42 OD TUBE

APPLICABLE STANDARDS & COMPLIANCE

Standard / Code	Scope	Status
OSHA 29 CFR 1910.23	Guarding of floor & wall openings	Independently Tested & Compliant
Ontario Occupational Health & Safety Act	Industrial fall protection — Canada	Compliant
ANSI A1264.1	Safety requirements for workplace walking/working surfaces	Meets Standard
CSI Section 077200	Roof & floor specialties specification	Classified

TECHNICAL SPECIFICATIONS

Parameter	Specification
Tube Outside Diameter (OD)	42 mm (42 OD)
Maximum Opening Width	8 ft (2,440 mm)
Maximum Gate Depth	9 ft (2,745 mm)
Head Clearance (all configs)	6 ft 6 in (1,981 mm)
Handrail Height	3 ft 6 in (1,067 mm) above floor level
Material — Option A	Hot-dip galvanized steel, 42 OD tube with mechanical fittings
Material — Option B	Structural aluminium alloy, 42 OD tube with mechanical fittings
Surface Treatment	Hot-dip galvanizing (steel) / mill finish anodised (aluminium)
Pivot Mechanism	Precision bearings along gate rails; balanced counter-pivot for single-operator use
Toe Board	Optional; mountable on all four sides
Anchorage Method	Mechanical pipe fittings to existing 42 OD guardrail tube; or mechanical / chemical anchor to concrete / masonry substrate
Installation Requirement	No welding required; site-adjustable for precise alignment
Configurations Available	4 standard (see Section 5); custom sizes on request



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PALLET SAFETY GATE SYSTEM

42 OD TUBE



FEATURES & BENEFITS

Feature	Engineering Benefit
42 OD tube construction throughout	Consistent fitting compatibility; no mixed tube sizes on site
No-weld mechanical fitting assembly	Rapid installation; no hot-work permits required
Retro-fit compatible with existing 42 OD guardrail	Eliminates need to replace compliant existing railing
Bearing-assisted balanced pivot	Single-operator safe use; reduces ergonomic strain
Site-adjustable fitting positions	Precise alignment to uneven or as-built structures
Corrosion-resistant finish (galvanized / aluminum)	Long service life in industrial / damp environments
Optional toe boards on all sides	Prevents objects rolling through lower opening
Passive (collective) protection — Level 2	Minimal operator training required; always-on protection
Custom sizes available on request	Adaptable to non-standard mezzanine opening geometry



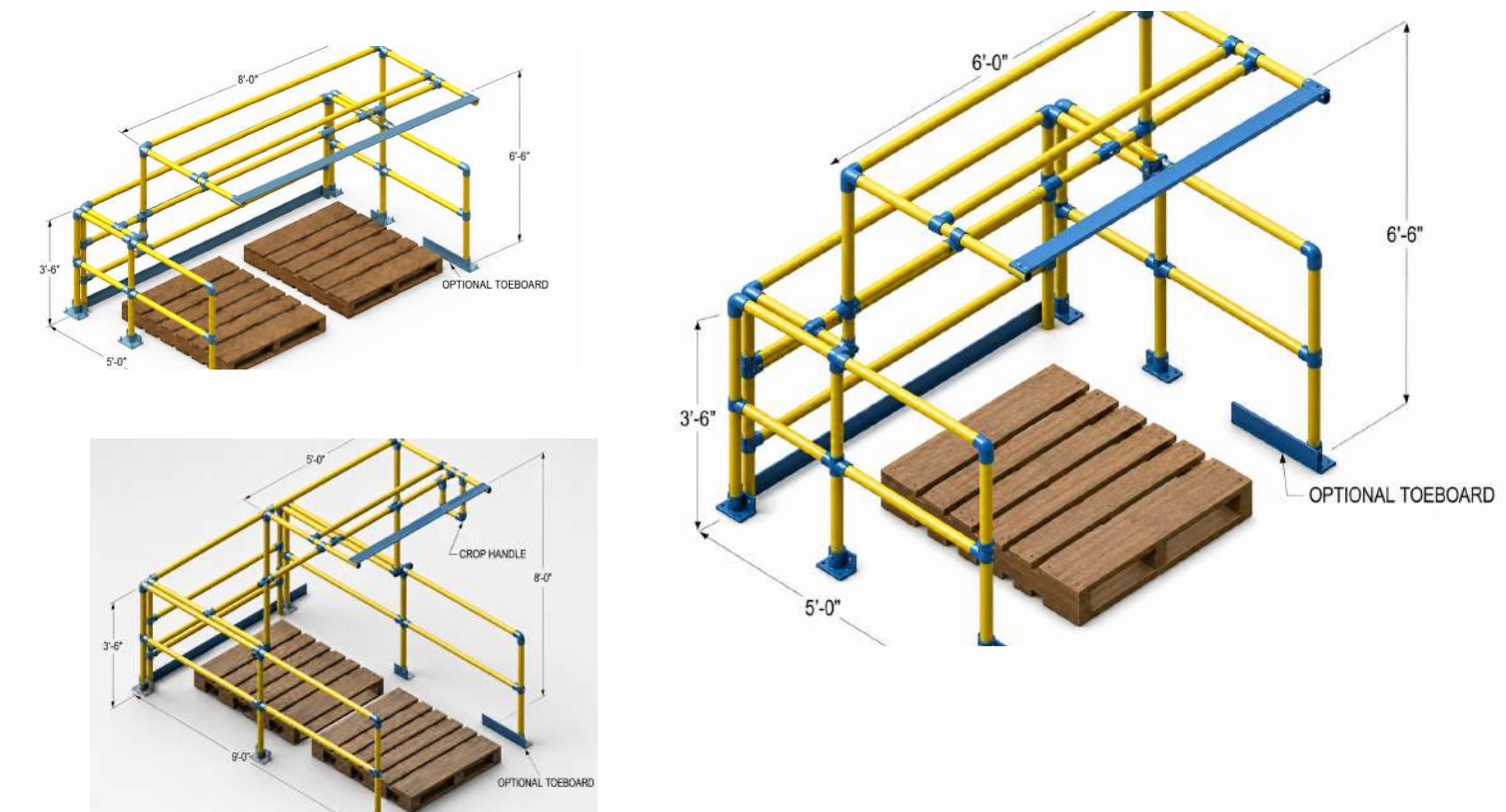
PALLET SAFETY GATE SYSTEM

42 OD TUBE

STANDARD CONFIGURATIONS- DIMENSIONAL DATA

Configuration	Clear Width	Gate Depth	Head Clearance	Typical Application
Standard	6 ft (1,830 mm)	5 ft (1,525 mm)	6 ft 6 in	Single-pallet transfer; most common mezzanine opening
Double Depth	5 ft (1,525 mm)	9 ft (2,745 mm)	6 ft 6 in	Extended pallet or long-load transfer
Double Width	8 ft (2,440 mm)	5 ft (1,525 mm)	6 ft 6 in	Wide-load or side-by-side pallet transfer
Full Size	8 ft (2,440 mm)	9 ft (2,745 mm)	6 ft 6 in	Maximum capacity; up to 4 pallets; large mezzanine openings

Note: All configurations are constructed from 42 OD tube. Tube material is selectable (galvanized steel or aluminium) per configuration. Custom dimensions available on request.





PALLET SAFETY GATE SYSTEM

42 OD TUBE

FALL PROTECTION HIERARCHY (Product Classification)

The Pallet Safety Gate is classified as a Level 2

Collective fall-protection solution within the recognized Hierarchy of Fall Protection,

Level	Classification	Description	Applicability
1	Elimination of Hazard	Re-design procedure, practice or layout to remove the fall hazard entirely. Best applied during planning or construction phase.	Not always achievable with operational mezzanines
2 ★	Collective (Passive)	Barriers and guardrails providing permanent passive protection. Low user-competency requirements. This product is a Level 2 solution.	THIS PRODUCT Pallet Safety Gate
3	Fall Restraint	Personal restraint system preventing the worker from reaching the fall hazard. Preferred over fall arrest.	Personal protective equipment required
4	Fall Arrest	Arrests a fall within acceptable force and distance limits. High user competency and training required. Purpose: save life after a fall.	Last resort; specialist training mandatory



PALLET SAFETY GATE SYSTEM

42 OD TUBE

INSTALLATION & ENGINEERING NOTES

- All tube throughout the assembly uses 42 OD sections; verify fitting bore sizes prior to ordering.
- No hot-work or welding is required. All connections are made with mechanical fittings tightened with standard hand tools.
- When attaching to existing guardrail, confirm that host rail tube is also 42 OD; adaptor fittings are available for non-42 OD host structures — consult engineering.
- For masonry or concrete substrates, use mechanical anchors (torque-controlled expansion anchors) or chemical anchors complying with local structural requirements.
- Ensure the pivot axis is plumb within $\pm 1^\circ$ to achieve balanced gate operation. Adjust fitting positions before final tightening.
- Optional toe boards must be fitted on all sides when the risk assessment identifies foot-level exclusion zones.
- Custom configurations are available; provide clear-width, depth, and substrate details when requesting.

MATERIALS & FINISH SPECIFICATION

Component	Galvanized Steel Option	Aluminium Option
Tube (all sections)	42 OD ERW steel tube, hot-dip galvanized to ASTM A123	42 OD 6063-T6 aluminium alloy extrusion, mill anodised
Mechanical Fittings	Hot-dip galvanized malleable iron — 42 OD bore	Aluminium alloy die-cast — 42 OD bore (KEE LITE range)
Pivot Bearings	Stainless steel ball bearings, sealed for life	Stainless steel ball bearings, sealed for life
Toe Board (optional)	Galvanized steel sheet, min. 150 mm height	Aluminium sheet, min. 150 mm height
Fasteners	A4 stainless steel set-screws supplied with fittings	A4 stainless steel set-screws supplied with fittings



PALLET SAFETY GATE SYSTEM

42 OD TUBE

ORDERING INFORMATION

Configuration	Tube OD	Material	Toe Board	Order Code Reference
Standard 6' × 5'	42 OD	Galvanized Steel	Optional	PG-STD-42-GS
Standard 6' × 5'	42 OD	Aluminium	Optional	PG-STD-42-AL
Double Depth 5' × 9'	42 OD	Galvanized Steel	Optional	PG-DD-42-GS
Double Depth 5' × 9'	42 OD	Aluminium	Optional	PG-DD-42-AL
Double Width 8' × 5'	42 OD	Galvanized Steel	Optional	PG-DW-42-GS
Double Width 8' × 5'	42 OD	Aluminium	Optional	PG-DW-42-AL
Full Size 8' × 9'	42 OD	Galvanized Steel	Optional	PG-FS-42-GS
Full Size 8' × 9'	42 OD	Aluminium	Optional	PG-FS-42-AL
Custom Configuration	42 OD	GS or AL	Optional	Contact Engineering