

**MEZZBARRIERS** is a division of Dale Lifting and Handling Specialists 2 Kelbrook Road, Parkhouse Street Industrial Estate, Manchester, M11 2QA Telephone 0161 223 1990 Email mezzbarriers@dale-lifting.co.uk Website www.dlhonline.co.uk

Here we endeavour to answer the most frequently asked questions from our pallet gate buyers.-Please click on the question for your answer

- Q What type of safety pallet gate do I need?
- Q What is the benefit of a MEZZBARRIERS Pallet gate?
- Q At what height do I need fall protection?
- Q What if my floor space is limited?
- Q What if the headroom is limited?
- Q Can I have an extra-wide pallet gate?
- Q Can I have an extra-depth pallet gate?
- Q Can I have an extra-high pallet gate?
- Q Can I have a safety gate for loading by hoist or an overhead crane?
- Q Can I have a safety gate for loading through a doorway?
- Q Can I have a pallet gate for use with a vacuum crane for handling sacks etc.?
- Q What pallet gate finish can I have?
- Q Are floor fixing bolts supplied with a pallet gate?
- Q How long does it take to install a pallet gate?
- Q Can you supply additional handrails for my project?
- Q Do your pallet gates have Health and Safety Executive (HSE) approval?
- Q Can you install my pallet gate?
- Q Do you provide a pallet gate site survey?
- Q How will the pallet gate be delivered?
- Q If the pallet gate is damaged in use, can it be repaired?
- Q Can you make me a custom pallet gate?

#### Q - What type of safety pallet gate do I need?

**Answer** - For loading standard size pallets onto a mezzanine floor, most models on the market may do the job. Although, not all of these will conform to the latest ISO 14122 standard.

The standard (Updated in 2016) requires that the pallet loading gate MUST be a double gate system which protects personnel from falling from the floor edge at all times.

The requirement for a double gate system, is that it surrounds the landing area whether open or closed. Swing gates, barrier chains or removable bars are not acceptable. And, to meet the standard the pallet gate must be fitted with a kick plate (Toe plate) on the edge gate to prevent objects falling from the edge and to prevent the passage of a body.

#### What if we don't fit a double gate system?

In a recent court case a DIY wholesaler was fined £2.2 million over the death of an agency worker who fell 2.5 m from an unguarded platform at a warehouse

#### What caused the accident?

A senior environmental health officer for the District Council, which brought the prosecution, stated that the victim had worked for the company for around six months.

The victim was unloading a delivery from a first-floor loading platform at the warehouse. One of the pallets exceeded the 1.8 m height restriction on the doorway that led into the warehouse and the operative was removing boxes from the top of the pallet so that the load could be moved inside. As he reached up, he slipped and fell off the edge of the platform. He was airlifted to hospital with severe head and leg injuries but died two weeks later.

#### Who was to blame?

The company's risk assessment was insufficient. The platform didn't have suitable guarding to prevent people who were working up there falling off. The single swing gates were just left open and provided no protection.

The company was fined at the Crown Court after it admitted breaching 2(1) and 3(1) of the Health and Safety at Work Act at a hearing at Magistrates' Crown Court.

Don't let this happen in your workplace

All of the <u>Mezzbarriers pallet gates</u> (shown below) are in conformance with the ISO 14122-2 & 3: 2016 standard, and meet the safety requirements of the HSE and other safety advisers.



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#### Q - What are the benefits of a Mezzbarriers Pallet gate?

**Answer** - There are loads of companies making standard up-and-over pallet gates. But what if you need a pallet gate for a difficult location or a non standard load or pallet size?

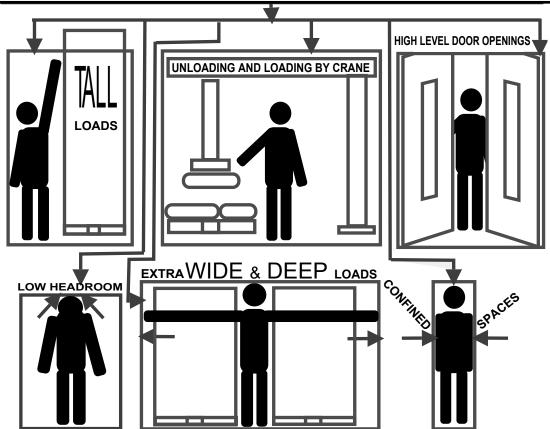
Mezzbarriers offer the largest range of standard and custom designed pallet gates in the UK.

#### Features and benefits

- Conformance with ISO 14122-3:2016
- Galvanised tubular steel construction or safety yellow thermoplastic tube coating with galvanised tube clamps. Aluminium kick plate..
- Stainless steel hex screws for component connections.
- No maintenance plastic pivot bushes with galvanised bolts and nuts with plastic locking collar.
- Supplied with major sections pre-assembled for simple installation. Installation and operating instructions provided.
- Balanced action provides easy operation.
- All parts are replaceable.

- Modular flexibility Modular system designs adapt to on-site conditions with the flexibility to retrofit, replace broken sections or can disassemble for repositioning when required.
- Flat pack delivery Flat pack delivery of all sections, palletised delivery to site and no specialist transport and crane lift.
- No-weld assembly of components eliminates the need for hot works permits and site shutdowns to deliver a safer, quicker setup, installation or repair with little or no damage to finish.
- Reduced corrosion Weather resistant hot dip galvanised or thermoplastic tube coating assembled with galvanised tube clamps with stainless steel hex screws reduces corrosion from welding, cutting, grinding.

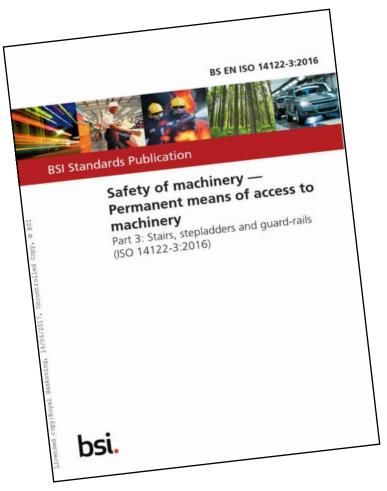
Do you need a special solution similar to the examples below? - No problem



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# Q - At what height do I need fall protection?

**Answer** - BS EN ISO 14122-2:2016 states that guard rails and safety fall protection gates shall be provided if there is a risk of falling from walkways or working platforms from a height of 500 mm or more.

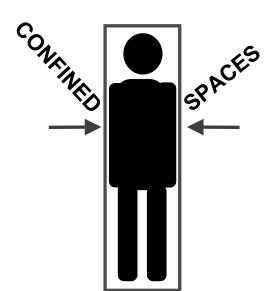


All MEZZBARRIERS safety pallet gates are in conformance with BS EN ISO 14122-3:2016



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# Q - What if floor space is limited?



**Answer** - Landing areas with limited space can be a problem for standard up-and-over pallet gates.

If you want to load in a confined space or where through traffic that cannot be blocked by a full-depth double gate system then the best option is our Omega Model which allows walk-under clearance for the inner gate when raised (Edge gate closed) or the Omega-Nu Model with an inner gate that folds up.

If the headroom is limited then our Sigma Model has a lower headroom. These models can be made in standard or custom sizes.

The BS EN ISO 14122 standard (Updated in 2016) requires that the pallet loading gate MUST protect personnel from falling from the floor edge at all times.

This requirement means a double gate system, that surrounds the landing area whether open or closed, is required. Swing gates, barrier chains or removable bars are not acceptable.



Omega Pallet Gate



Omega Nu Pallet Gate

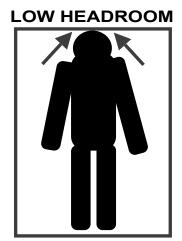


Sigma Pallet gate

All MEZZBARRIERS safety pallet gates are in conformance with BS EN ISO 14122-3:2016

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#### Q - What if the headroom is limited?



**Answer** - Working height can be a serious issue, The Delta Model low headroom gate which has gate bars that fold together can significantly increase loading height whilst operating within reduced headroom. Custom sizes are available for quotation.



**Delta Pallet Gate** 



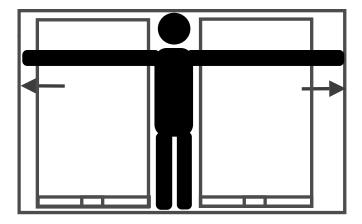
Zeta Low Edge Beam Pallet Gate

Some mezzanines are supported by the building frame and consequently, there is often a low roof beam or truss directly over the floor edge. The Zeta pallet gate can help with this problem and other fixed overhead obstructions. The Zeta has double pivots which allows for a lower edge gate (Under the beam) and a higher inner gate which removes the operator head hazard.

You may have to consider repositioning the gate opening to gain height. Also, moving any low hanging lights or other moveable overhead obstructions.

All MEZZBARRIERS safety pallet gates are in conformance with BS EN ISO 14122-3:2016

#### Q - Can I have an extra-wide pallet gate?



**Answer** -Many companies have wider loads or need to load multiple pallets with limited space.

All Mezzbarriers pallet gates are available in widths to accommodate pallets or loads wider than standard. Whilst maintaining compliance with the ISO standard for load test requirements and ease of use within particular design capabilities for each model.

#### Internal gap widths:

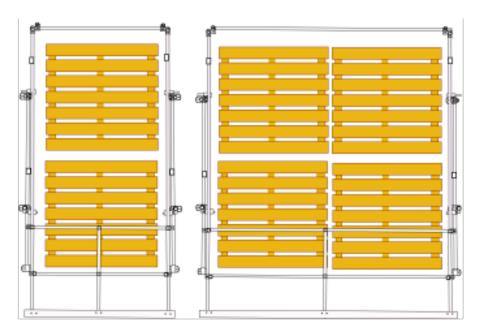
For standard European pallets, the recommended internal width is 1.5 m.

The maximum internal gap width in conformance with EN ISO 14122-3:2016 for Mezzbarrier models are::

- Atlas Model Standard pallet gate 1.8 m maximum Internal gap.
- Hi-gate (Open top) model special widths up to 2.0 m internal gap.
- Omega (Ultra space-saving) model in special widths up to 3.0 m internal gap.
- Omega-Nu (Ultra space-saving) model in special widths up to 3.0 m internal gap.
- Sigma (Multi-purpose) model in special widths up to 3.0 m internal gap
- Delta Low headroom model in special widths up to 3.5 m internal gap.
- Gamma extra-wide standard model in special widths up to 3.5 m internal gap.
- Titan extra-large model in special widths up to 3.5 m internal gap.
- Zeta low edge beam pallet gate in special widths up to 3.0 m internal gap

In order to maintain conformance with the ISO standard any remedial repairs, when carried out by the user, MUST NOT exceed these dimensions.

# Q - Can I have an extra-depth pallet gate?



**Answer** -Many companies have deeper loads or need to load multiple pallets with limited width space.

All Mezzbarriers pallet gates are available in depth to accommodate standard European pallets.

Some special models can be provided for extra-deep loads whilst maintaining compliance with the ISO standard for load test requirements and ease of use within particular design capabilities for each model.

#### Internal Depth:

For standard European pallets, the recommended internal depth is 1.5m.

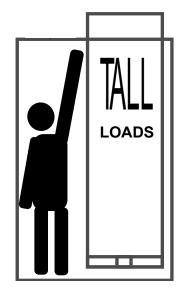
Models for extra depth

- Sigma (Multi-purpose) model in special depth up to 4.0 m
- Hi-gate (Open top) model in special depth up to 4.0 m
- Titan extra-large model in special depth up to 4.0 m

In order to maintain conformance with the ISO standard any remedial repairs, when carried out by the user, MUST NOT exceed these dimensions.

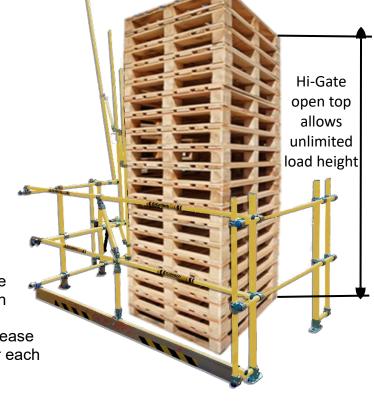
All MEZZBARRIERS safety pallet gates are in conformance with BS EN ISO 14122-3:2016

#### Q - Can I have an extra-high pallet gate?



**Answer** - All Mezzbarriers pallet gates are available in height to accommodate standard European pallets.

Many companies have very high loads. Some special models can be provided for extra-high loads whilst maintaining compliance with the ISO standard for load test requirements and ease of use within particular design capabilities for each model



Load Height: heights for Mezzbarriers models

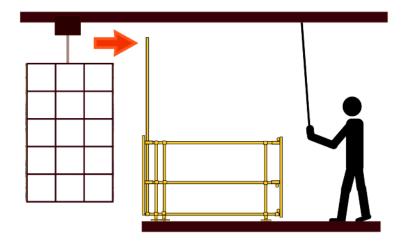
The maximum load heights in conformance with EN ISO 14122-3:2016 for Mezzbarrier models is::

- Atlas Model Standard pallet gate 1.65 m maximum load height
- Gamma extra-wide standard model 1.8 m standard load height
- Delta Low headroom model 2.0 m standard load height (Special heights up to 2.5 m
- Omega (Ultra space-saving) model 2.0 m standard load height (Special heights up to 2.5 m)
- Omega-Nu (Ultra space-saving) model 2.0 m standard load height
- Sigma (Multi-purpose) model 2.0 m standard load height (Special heights up to 2.25 m)
- Hi-gate (Open top) model with **UNLIMITED** Load height
- Titan extra-large model 1.8 m or 2.2 m standard load heights
- Zeta Low beam custom pallet gate Mad to suite headroom

All MEZZBARRIERS safety pallet gates are in conformance with BS EN ISO 14122-3:2016

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#### Q - Can I have a safety gate for loading by hoist or an overhead crane?



**Answer** - Practically all pallet gates on the market are unsuitable for hoist loading. However, DLHonline are experts in lifting and handling, our Mezzbarriers division has developed gate systems which can be loaded by hoist.

The Hi-gate (Open top) model is ideal for hoist platforms and can allow the load to be landed safely within an enclosed landing zone or with the load suspended to continue through the gate system. Ideal for Big-bag handling or machine maintenance application in plant rooms.

Where the headroom is a particular problem the Sigma (Multi-purpose) model can be utilised, although the load will require un-coupling from the hoist for removal from the landing zone as the raised inner gate will restrict further travel of the hoist.



Hi-Gate Universal Open Top Pallet Gate



Sigma Multi-Purpose Pallet Gate

## Q - Can I have a safety gate for loading through a doorway?

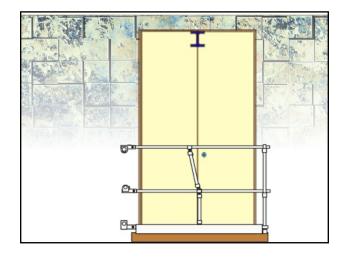


**Answer** - Most pallet gates on the market are unsuitable for openings with doors. as the distance from the inside face of the door to the outer ledge is too far for pallets to landed and allow the edge gate to close over the load.

The Sigma (Multi-purpose) model can be adapted for use with inward opening or roller shutter doors by drilling through the wall either side of the door frame and fixing the edge gate outboard of the opening. See <u>Sigma doorway questionnaire</u>.

The Hi-gate (Open top) model can also be used for openings including sliding doors, again with through-wall mounting.

Both models can also be used in a plant room opening with cantilever hoist runway loading.

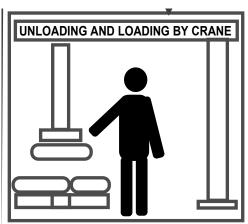


Hi-Gate Universal Open Top Pallet Gate



Sigma Multi-Purpose Pallet Gate

# Q - Can I have a pallet gate for use with a swing jib vacuum crane for unloading sacks etc.?



**Answer** - Very few pallet gates are suitable as the inner gate when raised will foul the crane and prohibit unloading.

The unique design of the Sigma (Multi-purpose) model can be adapted to have the inner gate fold-up over the edge gate. This innovative feature allows the crane arm unrestricted coverage over the entire pallet.





Sigma Multi-Purpose Pallet Gate

#### Q - What pallet gate finish can I have?

**Answer** - All Mezzbarriers pallet gates are supplied in standard steel tubes and tube clamps galvanised to BS EN ISO 1461.

Some special steel fabricated components where used are zinc sprayed. All fixings are hot-dipped galvanised to BS EN ISO 1461. All cast clamps grub screws are stainless steel to ensure minimal maintenance. Pivot bushes are nylon with galvanised bolt sets. Anti-slam dampers, where fitted, are in a powder coat finish.

Optional thermoplastic tube coating: Plas Coat PPA 571 ES. RAL 1021 ALERT SAFETY YELLOW. This finish is warm to touch and suitable for internal and external use. Tube clamps are supplied in hot-dipped galvanised to BS EN ISO 1461

Special RAL colours in powder coat may be available to special order. However, we strongly advise against this finish as pallet gates are subject to heavy use and a powder coat finish is easily chipped.



Standard all galvanised finish

Safety yellow thermoplastic coated tube finish with galvanised tube clamps

#### Q - Are floor fixing bolts supplied with a pallet gate?

**Answer** - Floor fixing bolts are not included with the gate as floor material and thickness vary greatly. The base feet have 14 mm dia. holes.

You will need M12 bolt sets for wood or steel floors. For concrete floors, anchor bolts should be used. Thin wooden floors may need extra large washers underneath to relieve stress around the hole. Check the number of bolts required in the pdf layout which can be downloaded on the product page.

If the underside of a wooden floor is blocked off, you may have to use coach screw bolts. Alternatively, rubber nuts fixing can also be used for a better grip. The rubber nut for an M12 bolt will require an M24 hole. The nut is a synthetic rubber sleeve with a flange head and a threaded brass insert at the opposite end. Used in hollow base materials where the anchor can expand in the cavity.



All MEZZBARRIERS safety pallet gates are in conformance with BS EN ISO 14122-3:2016

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#### Q - How long does it take to install a pallet gate?

**Answer** - Generally, it takes about two hours for two semi-skilled operatives to install a pallet gate on a mezzanine floor. If an existing handrail has to be removed it may take longer.

A risk assessment should be carried out prior to installation to include fall protection. Drilling into the floor (Concrete) or through the floor, which will require safe access to the underside of the floor to fit nuts and washers to fixing bolts. No welding is required.

If you have to make a gap it should be no more than 160 mm (80 mm per side) wider than the overall width of the chosen gate. You can download a pdf layout showing the dimensions on the product page.

Before you commence installation please read the installation instructions supplied with your pallet gate. If you can't find the instructions please contact us for another copy. Ensure the area of installation is clear and that all the gate sections are accounted for as shown in the installation instructions. The gate will be shipped with all main sections pre-assembled flat-pack on a pallet.



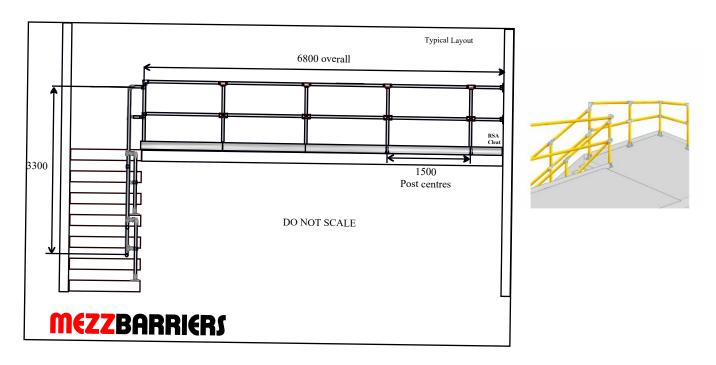
#### Q - Can you supply additional handrails for my project?

**Answer** - Yes, we supply ready-made posts and handrails for mezzanines and platforms in conformance with BS EN ISO 14122-3:2016. See our handrails <a href="https://example.com/here.">here.</a> some pallet gate models can be adapted for the connection of handrails either side. A layout sketch of your proposed project would be useful for quotation purposes.



Standard all galvanised finish

Safety yellow thermoplastic coated tube finish with galvanised tube clamps



**Example Layout** 

# Q. Do your pallet gates have a Health and Safety Executive (HSE) approval?

**Answer** - All Mezzbarriers pallet gate systems comply with BS EN ISO 14122-3:2016 in design and test criteria for mezzanine gates.

The HSE and other experts say that these approved types of safety gate must always be used to secure the loading area as they safely protect all employees from moving loads and falling injuries during the loading process. And, at all other times too!



## Q - Can you install my pallet gate?

**Answer** - Unfortunately no, but don't worry, we include installation and safe use instructions.

Our pallet gates are very simple to install with just a few tools. Our pallet gates as shipped with all the main sections pre-assembled and installation usually takes about two hours for two semi-skilled operatives provided with a risk assessment..

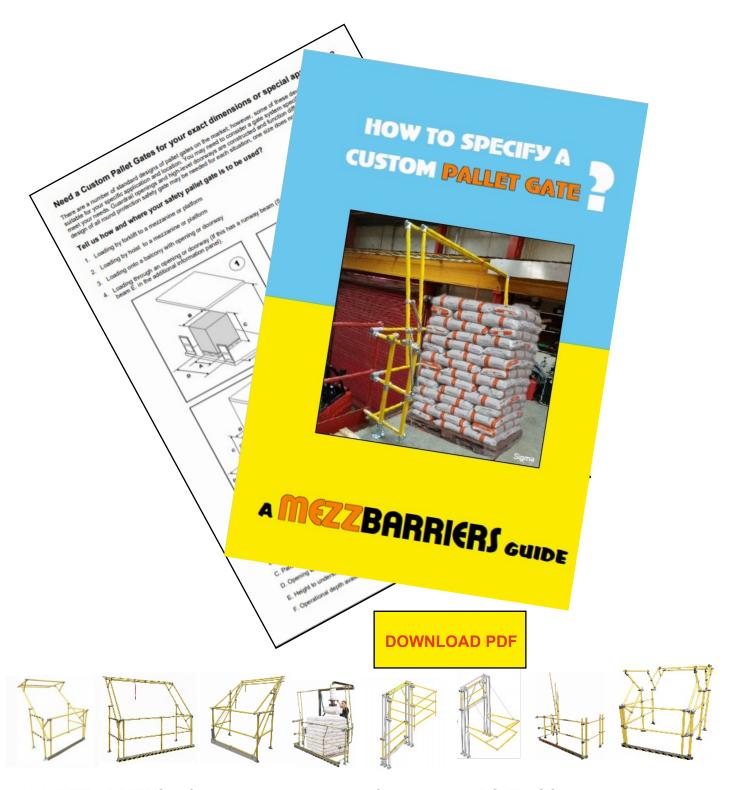
As platform surface materials vary, we don't include fixings. You will need to drill holes for M12 bolt sets or anchors depending on the floor construction.



All MEZZBARRIERS safety pallet gates are in conformance with BS EN ISO 14122-3:2016

## Q - Do you provide a pallet gate site survey?

**Answer** - No, but we have successfully supplied pallet gates all around the UK and as far as North America and Australia without us visiting the site. Just a few dimensions are needed. To get started download our How to Specify Pallet gates Guide.



All MEZZBARRIERS safety pallet gates are in conformance with BS EN ISO 14122-3:2016

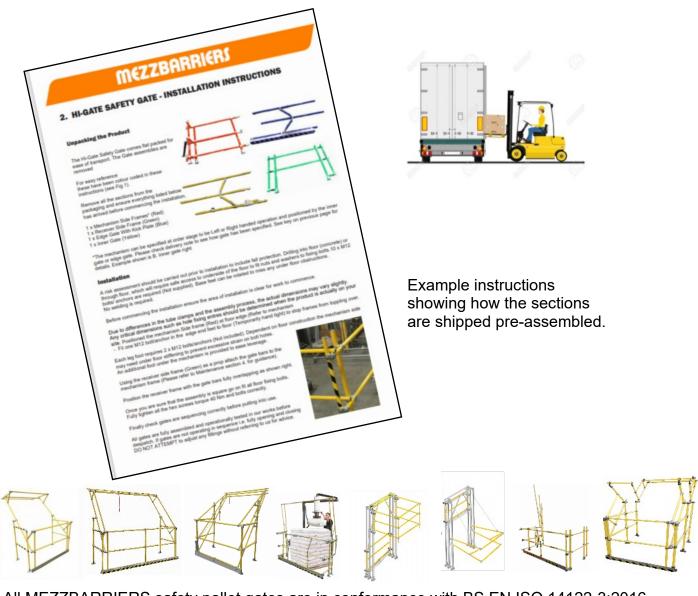
#### Q - How will the pallet gate be delivered?

**Answer** - Pallet gates are generally shipped flat-packed on a long pallet. The main sections are pre-assembled for easy assembly on site (Pallet gate instructions are provided).

The delivery location should be accessible to a truck/long trailer. If there are access restrictions for these kinds of trucks, there could be additional costs due to the necessity of transferring the merchandise to a smaller vehicle. If you have any restrictions, please contact us. Alternatively, pallet gates can be collected from our Manchester works by prior arrangement on completion.

The customer should take responsibility for the merchandise unloading process. That unloading should be made from the lateral sides of the truck (this kind of truck does not have back a lift platform).

We deliver the product packed on a pallet, so its unloading should be made preferably with a forklift. (Except our Atlas model which, if ordered alone, is shipped by parcel carrier)



All MEZZBARRIERS safety pallet gates are in conformance with BS EN ISO 14122-3:2016

#### Q - If the pallet gate is damaged in use, can it be repaired?

**Answer -** Yes, the Mezzbarriers range differs from most other pallet gate systems and methods of construction, various advanced features are incorporated into the design, production and finish with the clear aim of optimising the high quality and long life of the product.

The gate systems are built using Interclamp® tube clamp fittings with stainless steel screws for increased corrosion resistance and have been subjected to stringent vibration endurance resistance tests by an accredited independent test laboratory.

High quality galvanised finish – Interclamp components and tubes are hot-dipped galvanised to BS EN ISO 1461:2009 giving a corrosion-resistant finish for extended life. The galvanised tubes can also be supplied with safety yellow thermoplastic (Warm to touch) coating for indoor and outside use.

Special high-strength fabricated bolted components, where needed to protect excessive leverage weak points are zinc sprayed finish. Pivot points have no-maintenance nylon bushes.

Kick plates are in aluminium material. 6063T6.- Alloy tube is used in some wider models to reduce operator fatigue.

No Welding - All parts are replaceable in the event of damage. Usually, forklift impact damage to the gates can easily be repaired by the user on-site. However, some pallet gate models incorporate side frames with a complex mechanism that may require specialist repairs by us and will need to be returned to our works or totally replaced. Photos of the damage will allow us to assess any remedial work required.

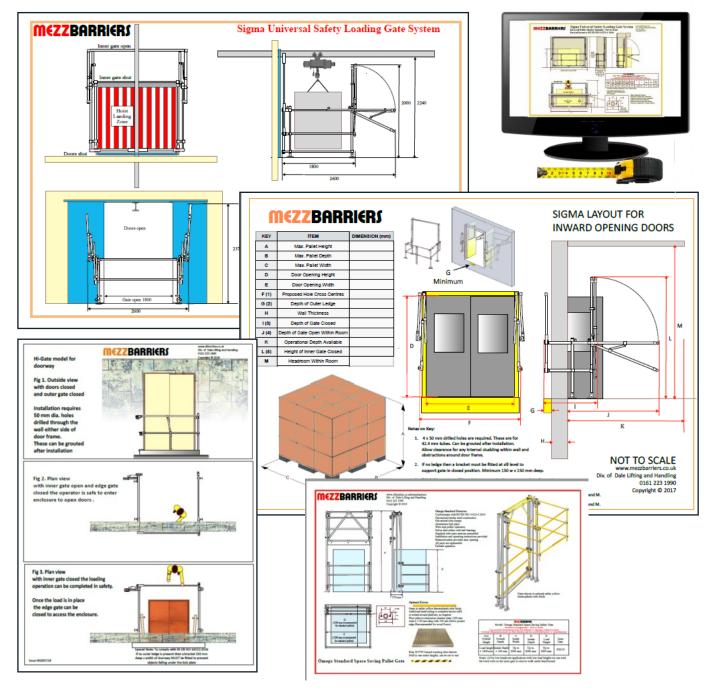
We carry a comprehensive stock of spare parts should you need them.





All MEZZBARRIERS safety pallet gates are in conformance with BS EN ISO 14122-3:2016

# Can you make me a custom pallet gate?



- Not sure which type of safety loading gate you need? - we're here to help!
- To get started; download our handy guide: How do I specify the right pallet gate?
- Use our online quote request form to tell us about your application and to obtain your no-obligation competitive quotation

We supply safety loading gates for almost any application - Mezzanines, work platforms, high level openings and doorways. In conformance with BS EN ISO 14122-3:2016 Standard or customised designs to suit your exact requirements -compliance with HSE guidelines.

Get a quote

All MEZZBARRIERS safety pallet gates are in conformance with BS EN ISO 14122-3:2016

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See Mezzbarriers pallet gates

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