

# 8. Dock shelters

Loading Systems dock shelters are manufactured to provide optimum stability and durability. Dock shelters provide an optimum seal between the internal and external environments, and assist with the reduction of energy consumption. As well as protecting your goods, dock shelters also contribute to an improved workplace atmosphere which can also lower your absence rates due to illness. A complete range is available to suit different types of vehicles.



## Quality and durability

All Loading Systems products meet the highest quality requirements. For dock shelters we only choose the highest quality materials to provide a high degree of wear resistance which can also withstand the effects of UV-radiation as well as extreme temperatures.

Loading Systems only selects stable constructions to ensure that our dock shelters continue to maintain the best possible appearance over a prolonged period of time and the lower sides will show no deflection.

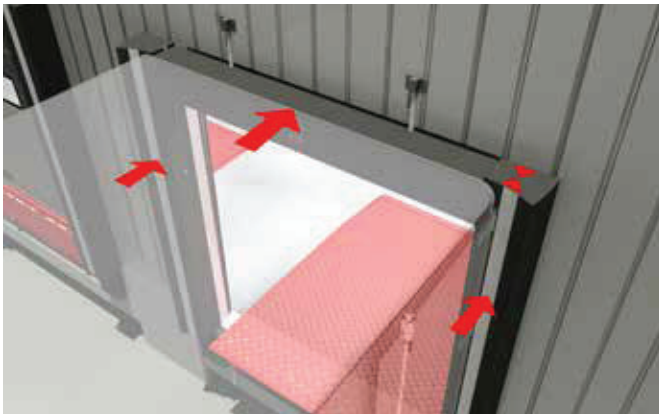
### 8.1 400 cushion dock shelter

The cushion dock shelters is best suited to vehicles which have minimal differences in size, for example a dedicated vehicle fleet.

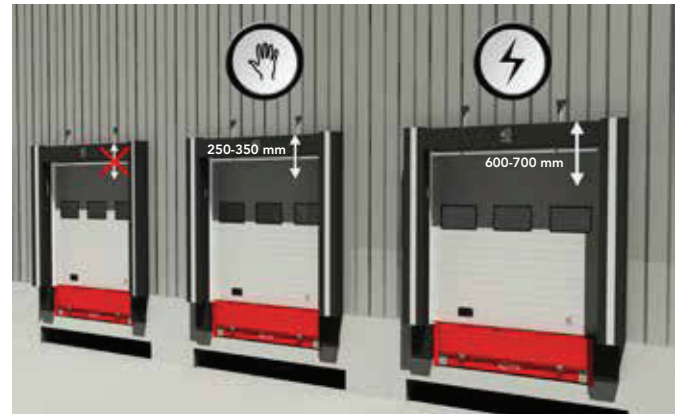
Loading Systems cushion dock shelters are often used at loading bays where high frequency of swapping vehicle trailers is common practice, or for use with mobile containers.



The cushion dock shelters ensure best draught seals and insulation is achieved. Sealing of the smallest gaps between the vehicle and wall of the building is achieved in most cases.



The horizontal top cushion can be supplied at a fixed height or can be supplied with an optional manual or electrical adjustment.



The cushions are available in a variety of different sizes (depth - width) and can be supplied with variety of colour options.

For extreme use, Loading Systems recommends reinforced side cushions by means of overlapping armoured plates along the entire height. These armoured plates follow the upward and downward movement of the docked vehicle. This increases the lifespan and durability of the dock shelter.



**Cushion dock shelters ensure the most efficient and effective draught sealing and insulation**

### 8.2 403 curtain dock shelter

The Loading Systems curtain dock shelters can be used for a wider variation of purposes and are well suited for loading and unloading operations with a wide variety of vehicle heights and widths.

#### Built-in

Based on your preferred aesthetic requirements, the curtain dock shelter can be incorporated into the wall of the warehouse or can be installed onto dock houses.



**A wide range  
of options  
to adjust the  
building's  
architectural  
aspects**



### Robust hinged frame

Most curtain dock shelters are delivered including a hinged frame. The frame design provides protection against damage if the docking vehicle is too high, or if a vehicle docks off centre. The front frame of the shelter moves on the hinge ensuring that the dock shelter and/or vehicle will not be damaged.

As a standard the dock shelter will move upwards to ensure that even in a compressed situation, the top curtain will not hang in the clear width during loading or unloading.



In situations with a low clearance height between the top of the shelter and any building overhang or canopy, a shear arm construction is recommended, which allows the shelter front frame to compress without increasing in height.



### Dock markings

To assist the vehicle to dock on the centre of the loading bay opening, markings on the dock shelter curtains serve as guidance for the driver.



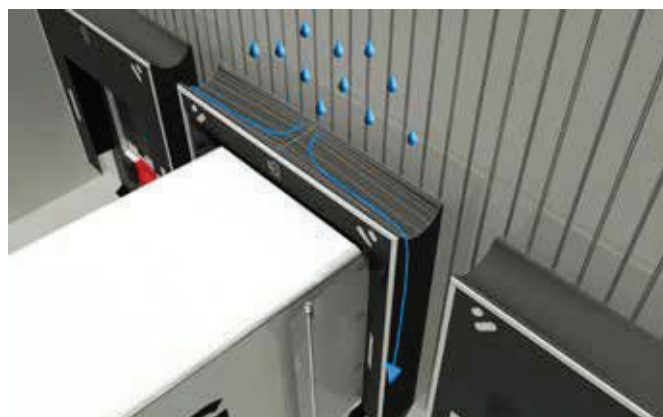
### Enclosing seal or projection cover – continuous

The top and side curtain (or projection cover) is made from one uninterrupted continuous seal which prevents contamination or draughts into the warehouse environment.



### Drainage

The design of the uninterrupted seal or projection cover ensures optimum drainage of the shelter roof, preventing water ingress into the door opening or onto the goods during loading and unloading. Drainage must be taken into account when designing the loading and unloading bay to ensure that rainwater will not run from the vehicle top into the loading and unloading opening.



### Optimal sealing

Selecting the correct width, height and depth of the dock shelter, in combination with the height of the top curtain and the width of the side curtains ensures optimal sealing between the warehouse and vehicle whilst also providing a clear opening through which to load and unload.

Since each loading and unloading situation is unique, Loading Systems can deliver any required dock shelter width or height. Furthermore, the top curtain and side curtains are also available in a variety of dimensions.

Dimensions	
Width	3200 up to and including 3600 mm (standard 3400 / 3500 mm)
Height	3200 up to and including 4600 mm (standard 3400 / 3500 / 4600*mm)
Depth	0 / 600 / 900 mm
Side curtains - Width	600 / 700 mm
Top curtains - Height	900 / 1000 / 1200 mm
* Exit ramp model	

### Innovative rolling curtains to bridge differences in height

When the difference in height between the shelter and the vehicle height is too large for a standard length top curtain, dock shelter can be supplied with an adjustable top curtain. This could apply to loading and unloading openings which are used for both high and low height vehicles, such as double-decked trailers and single deck vehicles or even delivery vans.



The electrical driven Loading Systems Rollerblind bridges a difference in height up to 2500 mm. The Rollerblind is integrated in the Loading Systems CombiControl control boxes.

The Rollerblind can also be retrofitted to existing shelters and most other dock shelters supplied by other manufacturers.



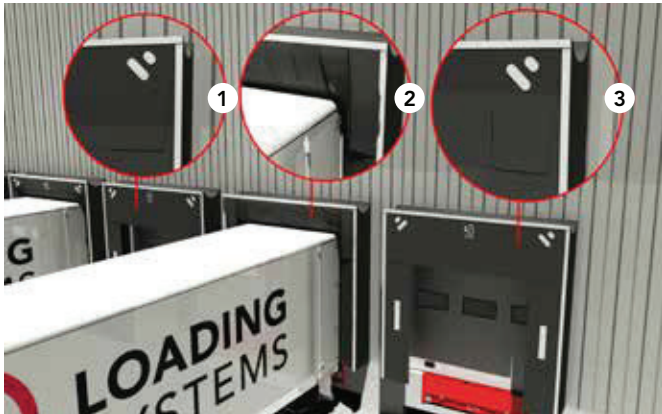
### Top curtains and side curtains

To ensure optimum flexibility and durability the side curtains on Loading Systems dock shelters include a monofilament in the fabric or we can reinforce the material with a laminated suspension spring.

To achieve an optimal seal it is essential that the top curtain folds over the corners of the vehicle. This requires an extremely flexible construction which is why Loading Systems uses a polyester fibre with multifilament weft or fabric which is reinforced with laminated suspension springs.

### Top curtains are also available with the following options:

1. standard top curtain
2. double laminated top curtain
3. cut-in top curtain

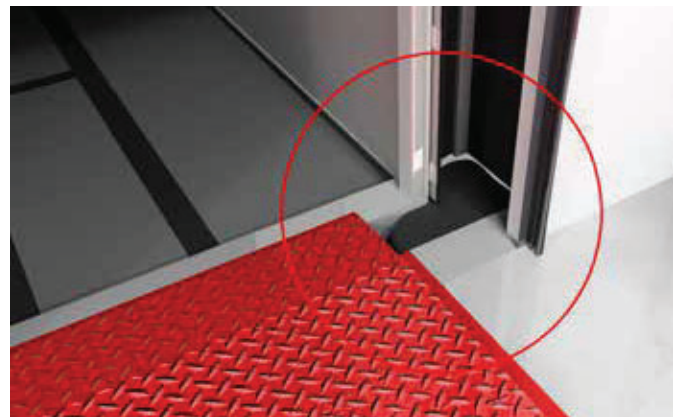


Heavy fabric can be delivered as a standard, either in black (≈RAL 9011) or in blue (≈RAL 5010). The fabric reinforced with laminated suspensions spring is available in a variety of colours.

The dock markings are available in a wide variety of colours. This allows you to fine-tune the colours to your corporate image or you might want to match the colour scheme to the dock leveller or industrial door.

### Recommended options:

1. dock number on top curtain
2. bottom corner pads



## Wide range and flexibility is well suited for loading bays with a variety of vehicles



### 8.3 405 curtains dock shelter with a special foam core

The Loading Systems PowerShelter 405 curtain dock shelter is extremely durable. This is achieved by a special foam core built into the side sections and an automated lifting roof section. This increases the life span of the dock shelter and improves the aesthetical appearance of the warehouse.



The 405 dock shelter is particularly well suited to container vehicles or vehicles which raise and lower over extreme distances during the loading and unloading process. For this type of situation the 405 curtain dock shelter is the perfect solution.

#### Roof section - adjustable in height

The 405 curtain dock shelter is provided with a roof section which has an automated lifting roof, which allows the roof to lift or move backwards when used by "high" vehicles (up to 4500 mm).



#### Side sections - allowing sideward and backward compression

The Loading Systems 405 curtain dock shelter side sections provide optimum flexibility and are supplied with a foam core which significantly prevents damage which can frequently occur if a vehicle docks on off centre.



# Loading Systems dock shelters are attractive, ultimately robust and durable

### 8.4 407 inflatable dock shelter

The Loading Systems PowerShelter 407 inflatable dock shelter moulds itself into the contours of the vehicle and is the most effective way of sealing between the vehicle and the warehouse. It is particularly well suited to vehicles which vary significantly in size.



### Built-in or front building

Based on aesthetics of the building, the dock shelter can be built-in into the warehouse at the construction stage or it could be incorporated into a dock house.



### Large variety of vehicles

The 407 inflatable dock shelter is extremely well-suited for a large variety of vehicle heights and widths. The inflatable top cushion can be inflated up to a height of 1700 mm without bulging outward, as an option. The Loading Systems 407 inflatable top cushion stops unfolding upon contact with the roof of the vehicle.

### Extremely well-suited to level access ramps

The inflatable dock shelter is excellently suited to level access ramps. When not inflated, it leaves the opening of the level access ramp completely free of obstruction allowing the building to be accessed without any hindrance to the opening. The 407 dock shelter facilitates the effective sealing of both high and low vehicles including delivery vans.



**Dimensions**

The inflatable cushion, which includes a folding operation, is delivered by Loading Systems in a variety of dimensions.

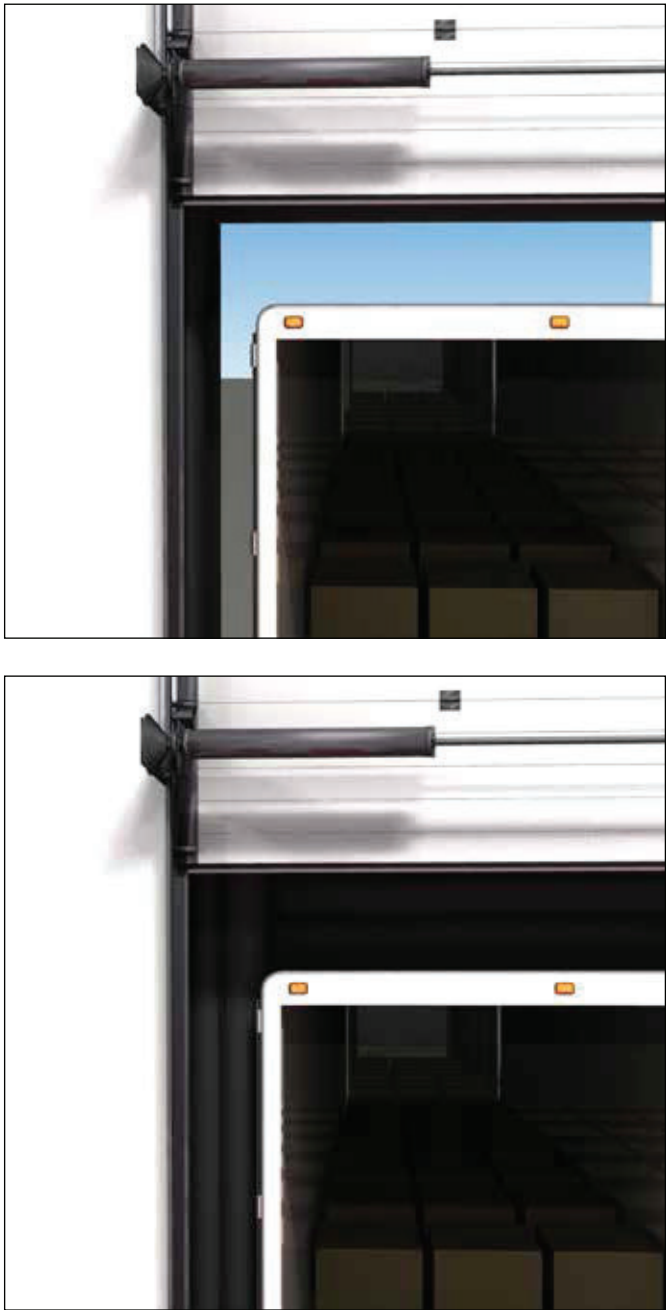
The steel insulation sandwich panels for the roof and side panels can be manufactured in various colours. The same applies to the dock markings and cushions.

Dimensions	
Width	3200 up to and including 4500 mm (standard 3500 mm)
Height	3700 up to and including 6000 mm (standard 3700 mm)
Depth	0 up to and including 1200 mm (standard 800 mm)
Side cushions - Width	600 / 700 / 800 mm
Top cushion - Height	1100 / 1300 / 1500 / 1700 mm

**The most efficient and durable sealing for loading and unloading bays**

**Durable materials & construction**

During the docking process, the inflatable cushions are fully retracted behind the docking lane markings. Only inflates when the vehicle has effectively docked on the loading bay with the cushions inflating within seconds. Due to low contact friction between the shelter and the vehicle, the 407 dock shelter is an extremely durable model.



In the event of a docked vehicle departing unexpectedly while the cushions are still inflated, the free moving fastening ensures that the inflated cushions can rotate outward, which prevents damage to the shelter components and cushions.

When compared to other Loading Systems dock shelters, the 407 dock shelter cushions are extremely tear-resistant and are resilient to damage by sharp or protruding vehicle parts or premature vehicle departures. The welded black PVC fabric cushions are also resilient to extreme weather conditions.

The heavy duty fabric used in the Loading Systems cushions is extremely leak resistant. Loading Systems also uses a mechanical tube motor driven retraction which ensures the cushions are always neatly stacked behind the dock lane markings when not inflated.

### Integrated operation

The Loading Systems 407 dock shelter control station is integrated in the Loading Systems CombiControl control boxes. Upon request, the 407 dock shelter can also be programmed to suit the logic of your preferred operating sequence. To ensure optimum effectiveness is achieved we always ensure that the loading bay door can not be opened until the 407 dock shelter is inflated.

