



## PRODUCT INFO

The flexible design means this barrier is a durable construction that enables these barriers to be repositioned and reused as many times as your project requires.

Manta Barriers are made from long-lasting, recyclable galvanised steel, which is powder-coated to provide high visibility and the capability to withstand all weather conditions. Each unit is connected to another, using a removable steel pin, to form a continuous barrier system.

These barriers are manufactured in the UK.

## KEY FEATURES

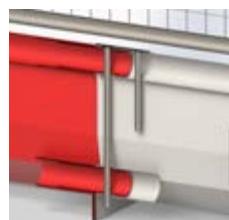
- Cost-effective solution
- Up to 144m per load
- Tested as free-standing with no ground drilling needed
- Class A Wind Tunnel Test Certification
- Crash tested W7 of BS EN 1317:2010
- Quick and easy to assemble, install and reposition
- Lightweight & stackable for easy transportation and storage
- Compatible with top-section safety fencing for added safety and perimeter protection
- Available in 2 high visibility colours

## NO CONNECTION BARS NEEDED

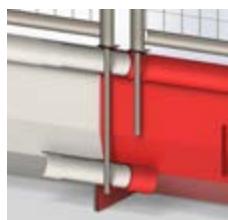
The Barrier maintains its tested safety standards when also supporting either a 1.5m long pedestrian fence or 3m long temporary fence, which eliminates the need for a connection bar.



Connection pin



Using pin plate



Using fence add-on bar extensions

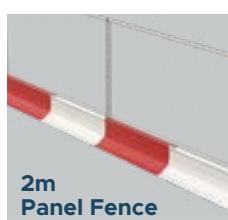
## FENCING OPTIONS



1m  
Ped Fence



1m  
Hi-vis Fence



2m  
Panel Fence

## SPECIFICATIONS

Product ID	MTS200000	MTS200010
Colour	Red	White
Height (mm)	420	420
Depth (mm)	500	500
Width (mm)	1500	1500
Weight (kg)	48	48

## MANTA BARRIER CORNER SECTIONS

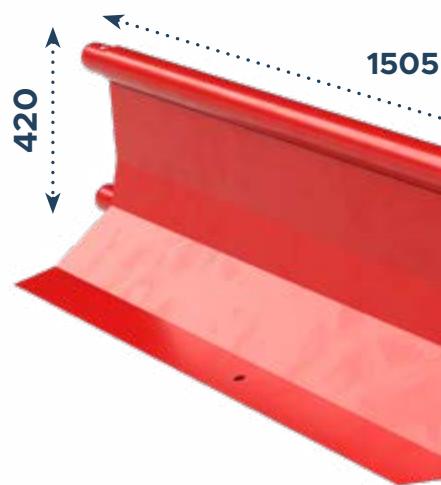
With Manta Barriers there is the added ability to rotate units at 90° degrees to accommodate bends.

Common applications include defining pedestrian walkways and vehicle access, for example, to create a pit lane on a construction site or anywhere that requires the demarcation of vehicle traffic and footfall for pedestrian, visitor and workforce safety.

## APPLICATION

- Easy connection brackets
- 45° degree angled body to allow for 90° degree angles when joined
- Installation of angled sections quick and easy to perform
- The angled sections maintain a very similar visual appearance to the standard units, for consistency throughout the boundary
- Fencing add-ons can still be used with the angled sections
- Perfect for forming pedestrian walkways and construction site access areas

Type 2 Unit



Type 1 Unit



ID Markers

## CORNER SECTIONS SPECIFICATIONS

Product ID	MTS200100	MTS200105	MTS200120	MTS200125
Type	Type 1	Type 1	Type 2	Type 2
Colour	Red	White	Red	White
Height (mm)	420	420	420	420
Depth (mm)	500	500	500	500
Width (mm)	1570	1570	1505	1505
Weight (kg)	43	43	43	43

Manta Barriers functioning at 90° degree angle with fence



## MANTA BARRIER END SECTIONS

A run of Manta Barriers can be neatly finished off by using our specially designed end section, the finishing section is available for both male and female connections and ensures there are no unwanted edges that could potentially be hazardous.

The end section maintains the height of the standard unit and has the advantage of also being compatible with all of the available fencing add-ons. Other benefits include the end sections ability to act as a cushion absorbing impact and in turn protecting connection parts should the Manta barrier be impacted.

In addition the end section allows for a nice tidy finish to the end of a Manta Barrier run, it also has benefits due to its octagonal shape which minimises movement when in transit if stacked on its side, compared to round competitor units which are prone to excessive movement when in transit.

### END SECTIONS SPECIFICATIONS

Product ID	MTS 200180	MTS 200185	MTS 200190	MTS 200195
Type	Male	Male	Female	Female
Colour	Red	White	Red	White
Height (mm)	500	500	500	500
Depth (mm)	490	490	490	490
Width (mm)	660	660	580	580
Weight (kg)	17	17	19	19

Male End Section



Female End Section



## MANTA BARRIER 1.5M PEDESTRIAN FENCE

The Manta Barrier Pedestrian fence is very lightweight, weighing only 5kg. Despite its light weight, the pedestrian fence extension increases the overall height of the barrier system to a substantial 1m.

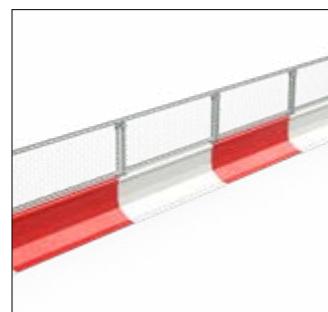
This quick and easy to install extension provides the additional security often needed to protect vehicle drivers, workforce and pedestrians.

By using the pedestrian fence extension you have the reassurance of knowing the extra height achieved will reduce the risk of a passer-by perimeter breach.

### KEY FEATURES

- Increases overall height to 1m
- Legs double up as connection pins
- Provides protection to workforce and pedestrians
- Anti-climb mesh fence construction
- Manufactured using galvanised steel
- Reduces the risk of the barrier perimeter being breached
- Quick and easy to install

Row of Manta Barriers with pedestrian fence



### 1.5M PEDESTRIAN FENCE SPECIFICATION

Product ID	MTS200450
Height (mm)	580
Depth (mm)	38
Width (mm)	1463
Weight (kg)	6

## MANTA BARRIER CHAPTER 8 SYSTEM

This enhanced version of the 1.5m pedestrian fence has high visibility and highly reflective red and white markings.

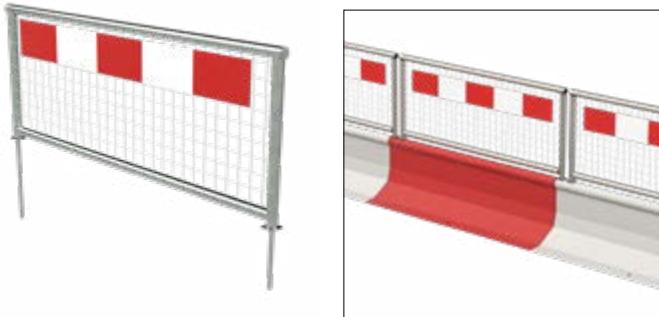
The additional high visibility markings ensure compliance to Chapter 8 requirements, the system is also compliant to road traffic standards BSEN8442 & BSEN12899-1.

Our Manta Barrier Chapter 8 System is strong enough to remain stable in adverse weather conditions due to the substantial 42kg Manta Barrier base unit, this is significant when you consider many Chapter 8 barriers weigh less than 15kg.

## KEY FEATURES

- High visibility
- Chapter 8 compliant
- Compliant to requirements BSEN8442 & BSEN12899-1
- Increases overall height to 1m
- Legs double up as connection pins
- Provides protection to workforce and pedestrians
- Anti-climb mesh fence construction
- Manufactured using galvanised steel
- Reduces the risk of the barrier perimeter being breached

**Row of Chapter 8 Manta Barrier units**



### HIGH VISIBILITY 1.5M PEDESTRIAN FENCE SPECIFICATION

Product ID	MTS200500
Height (mm)	580
Depth (mm)	38
Width (mm)	1463
Weight (kg)	6

## MANTA BARRIER 3M FENCE

In addition to its stand alone benefits, the Manta Barrier can accommodate one of the lightest 3m anti-climb fence panels on the market, allowing for greater ease when manually handling.

The add-on panel massively increases the overall height to a lofty 2m. This quick and easy to install extension provides the reassurance of knowing the chances of a perimeter breach are dramatically reduced.

## KEY FEATURES

- Increases overall height to 2m
- Legs double up as connection pins
- Provides protection to workforce and pedestrians
- Anti-climb mesh fence construction
- Manufactured using galvanised steel
- Drastically reduces the risk of the barrier perimeter being breached
- Quick and easy to install

**Row of Manta Barriers with 3m fence**



### 3M FENCE SPECIFICATION

Product ID	MTS200400
Height (mm)	1580
Depth (mm)	38
Width (mm)	2968
Weight (kg)	15

## MANTA TO MASS ADAPTA-TION OPTIONS

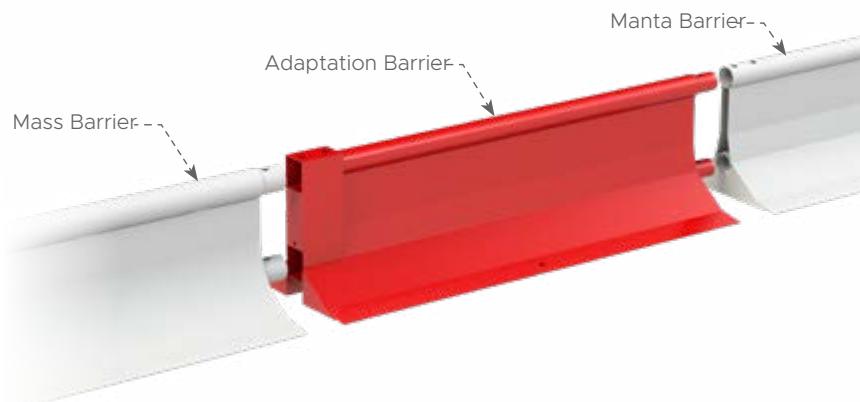
The Manta to Mass Adaptation Barrier is a robust way to fix a row of Mass barriers to a row of Manta barriers.

This barrier is connected via the existing pin method present in both barrier systems. Along side this it can be used with all fences that come with the barriers to ensure a seamless transition of your perimeter. The powder-coated finish ensures a professional way to segregate pedestrian traffic and visitors on your site.

### Mass connected to a Manta via the Adaptation Barrier

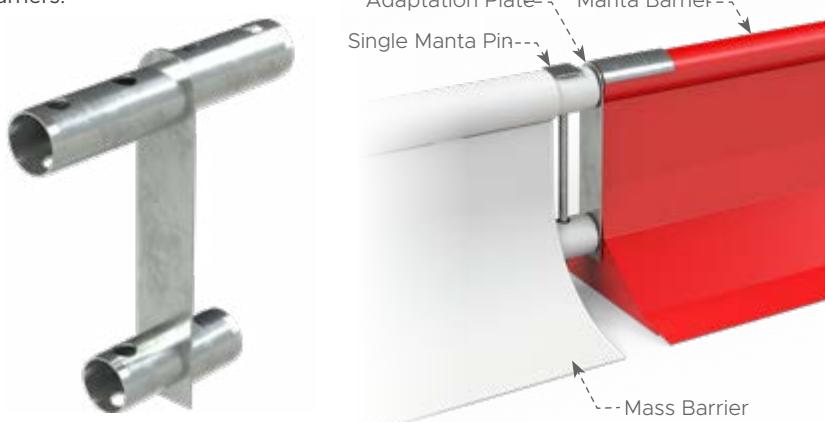


Product ID	MTS200220	MTS200280
Type	Adaptation Barrier	Adaptation Plate
Height (mm)	420	388
Depth (mm)	38	80
Width (mm)	1500	315
Weight (kg)	46	3

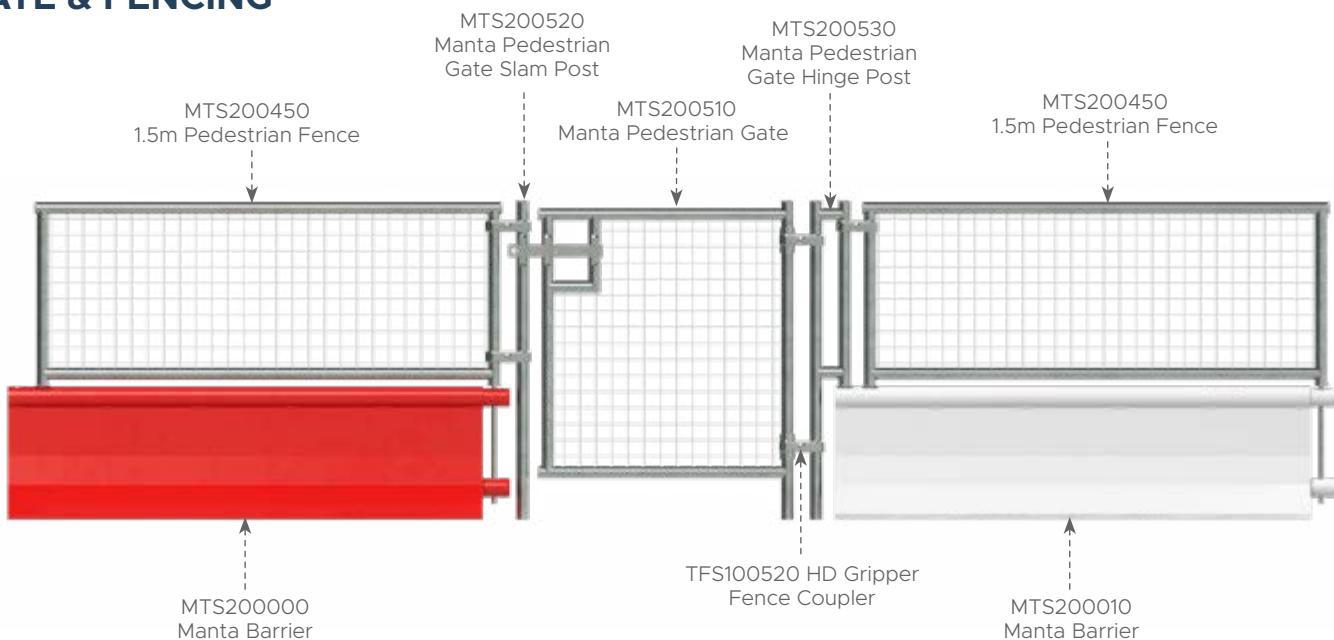


## MANTA TO MASS ADAPTATION PLATE

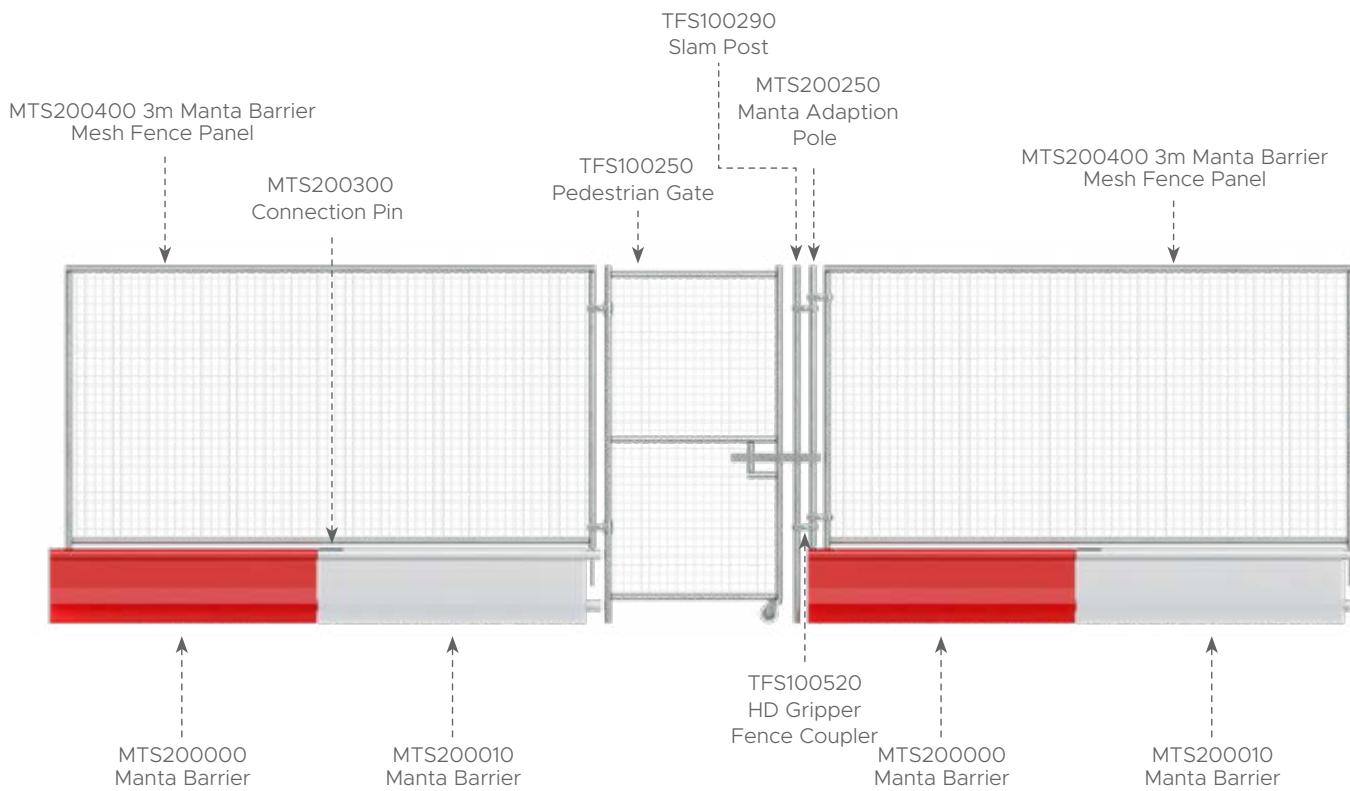
The Manta to Mass Adaptation Plate is a quick and easy way to fix a row of Mass barriers to a row of Manta barriers.



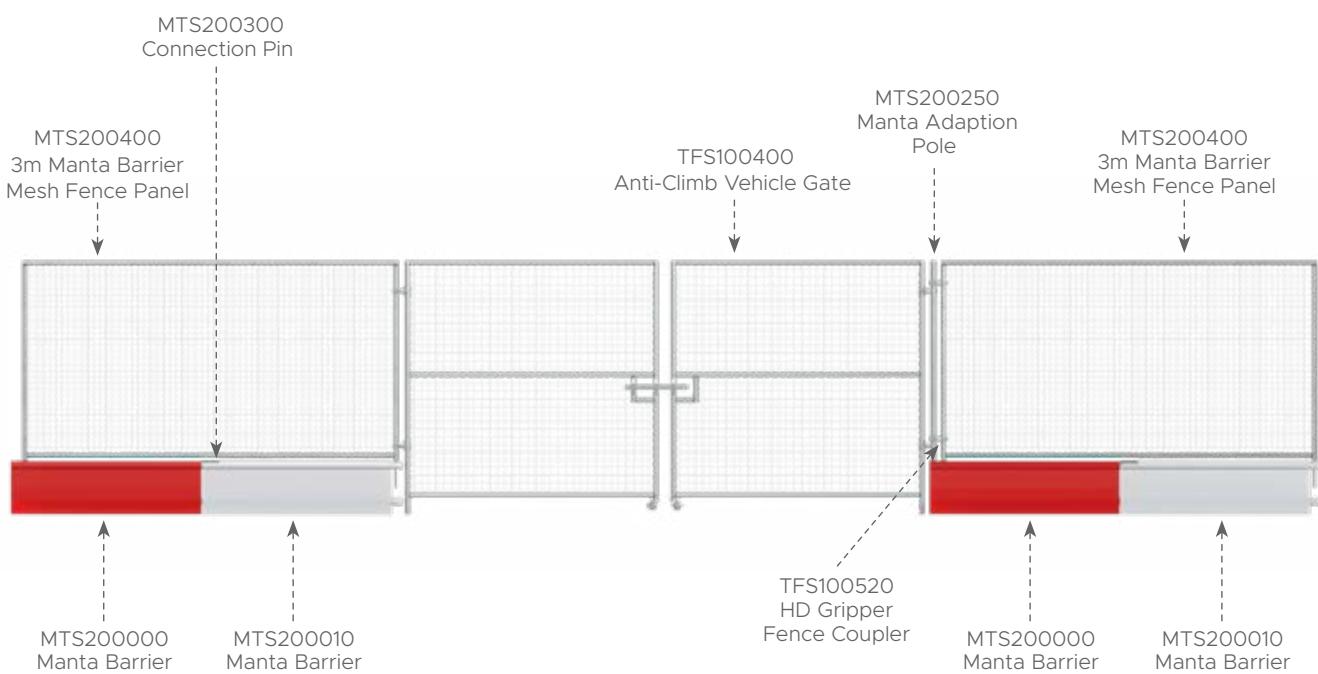
## MANTA BARRIER LOW PEDESTRIAN GATE & FENCING



## MANTA BARRIER PEDESTRIAN GATE & FENCING



## MANTA BARRIER VEHICLE GATE & FENCING



**MANTA BARRIER - BASE UNIT**



Product ID	MTS200000 (Red), MTS200010 (White)
Height (mm)	420
Depth (mm)	500
Width (mm)	1500
Weight (kg)	48

**MANTA CORNER - TYPE 1**



Product ID	MTS200100 (Red), MTS200105 (White)
Height (mm)	420
Depth (mm)	500
Width (mm)	1570
Weight (kg)	43

**MANTA CORNER - TYPE 2**



Product ID	MTS200120 (Red), MTS200125 (White)
Height (mm)	420
Depth (mm)	500
Width (mm)	1505
Weight (kg)	43

**MANTA END - FEMALE**



Product ID	MTS200190 (Red), MTS200195 (White)
Height (mm)	500
Depth (mm)	490
Width (mm)	580
Weight (kg)	19

**MANTA END - MALE**



Product ID	MTS200180 (Red), MTS200185 (White)
Height (mm)	500
Depth (mm)	490
Width (mm)	660
Weight (kg)	17

### 3M FENCE



Product ID	MTS200400
Height (mm)	1580 (2000 installed)
Depth (mm)	38
Width (mm)	2968
Weight (kg)	15

### 1.5M PEDESTRIAN FENCES



Product ID	MTS200500 (Hi-Vis), MTS200450
Height (mm)	580 (1000 installed)
Depth (mm)	38
Width (mm)	1463
Weight (kg)	6

### CONNECTING PIN



Product ID	MTS200300
Height (mm)	380
Depth (mm)	73
Width (mm)	140
Weight (kg)	1.2

### CONNECTING PIN - SINGLE PIN



Product ID	MTS200310
Height (mm)	370
Depth (mm)	50
Width (mm)	50
Weight (kg)	1

### ADAPTION POLE - 2M



Product ID	MTS200250
Height (mm)	1950
Depth (mm)	50
Width (mm)	50
Weight (kg)	2

## 2M HOARDING PANEL



Product ID	MTS200030 (Red), MTS200040 (White)
Height (mm)	1580 (2000 installed)
Depth (mm)	38
Width (mm)	1463
Weight (kg)	19

## 2.4M HOARDING PANEL



Product ID	MTS200060 (Red), MTS200070 (White)
Height (mm)	1980 (2400 installed)
Depth (mm)	38
Width (mm)	1463
Weight (kg)	23

## 2M HOARDING INFILL PANEL



Product ID	MTS200080
Height (mm)	1450
Depth (mm)	15
Width (mm)	140
Weight (kg)	2

## 2.4M HOARDING INFILL PANEL



Product ID	MTS200090
Height (mm)	1850
Depth (mm)	15
Width (mm)	140
Weight (kg)	3

## HOARDING STABILISER



Product ID	MTS200095
Height (mm)	1905
Depth (mm)	38
Width (mm)	130
Weight (kg)	2

## MANTA BARRIER CRASH TESTED

The ASI achieved by the Manta Barrier is 0.2 and THIV 13, this results in an A rating for severity which is the lowest and best result achievable.

This is a report summary of the crash test conducted by Horiba Mira Ltd, describing the dynamic impact test of the Manta Barrier System to W7 of BS EN 1317:2010. The impact conditions of this test were met with total test mass of 1300 ( $\pm 65$ ) kg at a speed of 82 (-0 + 7%) km/h (50.9mph), at an angle of 15.7° (+1.5, -1) degrees to the line of the barrier traffic face and therefore satisfactory. The vehicle model used to undertake the test was a Ford Focus.

The correct installation of the test item was the responsibility of the client. The length of the barrier tested was 60m (including anchor terminals), the dynamic deflection was 1.6m and the working width was 2.2m. No part of the barrier penetrated the interior of the vehicle and no part of the barrier was ejected.

## CRASH TESTED SUMMARY

- Best possible result for ASI & THIV assessment, achieving an A rating
- Passed W7 of BS EN 1317:2010 impact test
- Withstood 1300kg impact at 50.9mph from a 15.7° degree angle
- No reinforcement bar used or required
- Velocity and angle values were within tolerance limits
- The vehicle did not breach the device
- The vehicle did not roll over within the test area
- No part of the vehicle was detached

**Initial point of impact****Degree of deflection at point of highest force**

## MANTA BARRIER WIND TESTED

The Manta Barrier has been meticulously tested within an internationally renowned wind tunnel testing facility, during which the barrier system achieved two classification A passes and one classification B pass.

Three arrangements of the Manta barrier system have been tested, these include two adjoined Manta barriers without any add-ons, two adjoined Manta barriers with the lightweight pedestrian fence add-on, and two adjoined Manta barriers with the anti-climb mesh fence add-on. Each arrangement of the system achieved a high level of wind resistance, with the exact resistance figures detailed above the diagrams to the right.

**44 mph****74 mph****60 mph****CLASSIFICATION: A**

Speed Limit Reached:  
120km/h (33.3m/s)

**CLASSIFICATION: A**

Speed Limit Reached:  
97km/h (26.9m/s)

**CLASSIFICATION: B**

Speed Limit Reached:  
72km/h (20.0m/s)

# MANTA BARRIER

## STACKING GUIDE

 info@mantabARRIER.com  www.mantabARRIER.com

**MANTA**  
BARRIER



1



2

Please be aware the Manta Barriers measure 1.5m in length and will therefore slightly overhang the 1.2m pallet they are to be placed onto, this overhang is acceptable within these guidelines.

Place two Manta Barriers side by side so the inner edge of each foot touches the opposing barrier. Each barrier should align at both ends.

When together the barriers should take a central placement on top of the pallet.



3



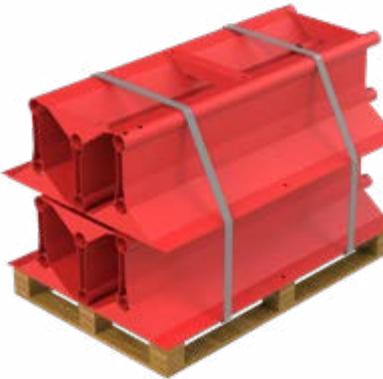
4

Two additional lengths of pallet wood must now be placed onto the flat base of the previously positioned barrier.

These lengths of wood should be placed approximately 15cm within each end of the three stacked barriers, and be placed in such a way the centre of the wood is central to the base of the third barrier and parallel to the pallet beneath.



5



6

Now one last barrier must be carefully placed on top of the last two barriers to fit inside the empty void that was created.

The feet of this barrier should be evenly supported by the heads of the previous two barriers, and also align with the ends of the previous two barriers.

The exposed base of this barrier must be even and level in readiness for the next processes.

Insert one Manta Barrier upside down to fit inside the empty void that was created from the placement of the previous two barriers.

The feet of this barrier should be evenly supported by the heads of the previous two barriers and also align with the ends of the previous two barriers.

The exposed base of this barrier must be even and level in readiness for the next processes.

Carefully place a further two Manta Barriers side by side onto the previously placed pallet wood so that the inner edge of each foot touches the opposing barrier, each barrier should align top and side with the stacked barriers below.

When together both the barriers should take a central placement in relation to the bottom barriers and pallet.

Now a check must be carried out to ensure all of the stacked barriers are evenly balanced, stable and level.

Once this check is successfully completed the whole stack must be secured by heavy duty polypropylene pallet strapping to run from the underside of the pallets top level, all the way around the six stacked barriers. Two rings of strapping must be applied approximately one quarter distance from each end of the stacked barriers.