

# MANTA<sup>®</sup> BARRIER

Durable, All-Weather Road Safety  
& Construction Barriers

# MANTA<sup>®</sup> BARRIER



info@mantabarrier.com



www.mantabarrier.com



**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 to SafeSite's bespoke design.

**NO CONNECTION BARS NEEDED**

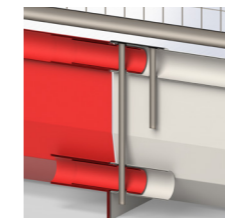
The Barrier maintains its tested safety standards when also supporting either a 1.5m long pedestrian fence or 3m long temporary fence, which eliminates the need for a connection bar.

**KEY FEATURES**

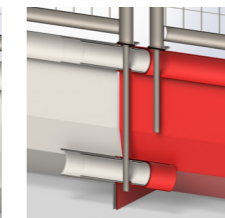
- > Cost-effective solution
- > Up to 144m per load
- > Tested as free-standing with no ground drilling needed
- > Class A' Wind Tunnel Test Certification
- > Crash tested W7 of BS EN 1317:2010
- > Quick and easy to assemble, install and reposition
- > Lightweight & stackable for easy transportation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



Connection pin

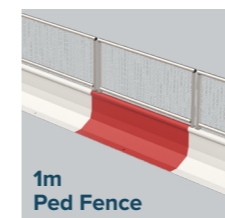


Using pin plate

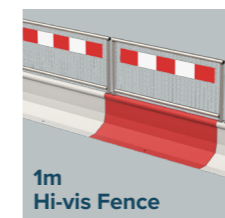


Using fence add-on bar extensions

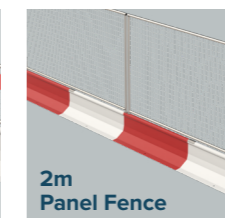
**FENCING OPTIONS**



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.

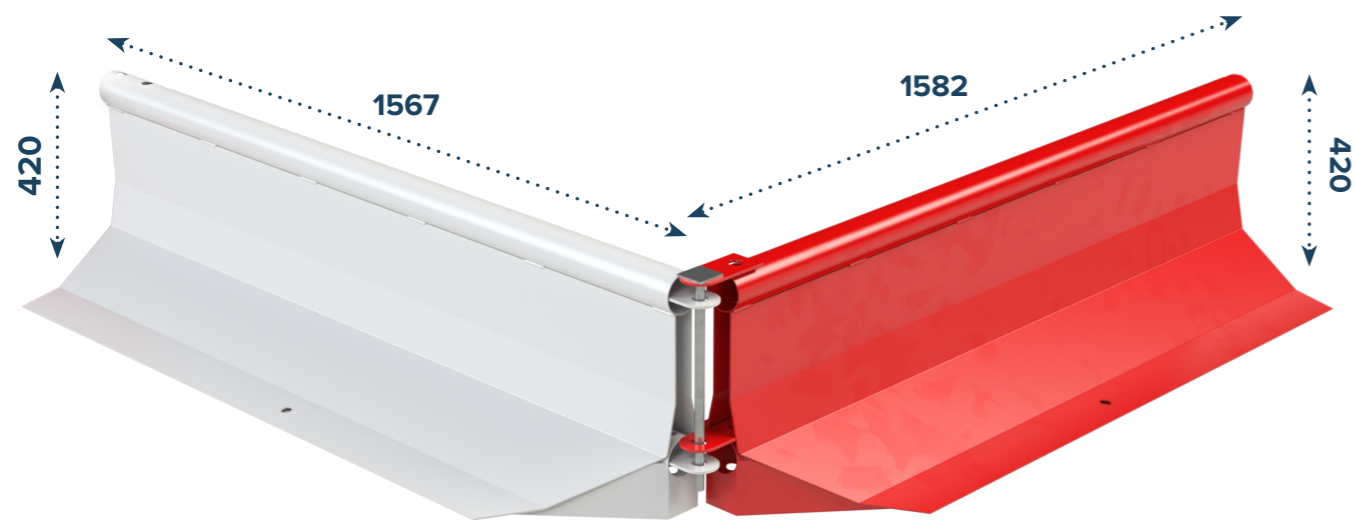
Common applications include defining pedestrian walkways and vehicle access, for example, to create a pit lane on a construction site or anywhere that requires the demarcation of vehicle traffic and footfall for pedestrian, visitor and workforce safety.

## 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

Female Type 1 Section

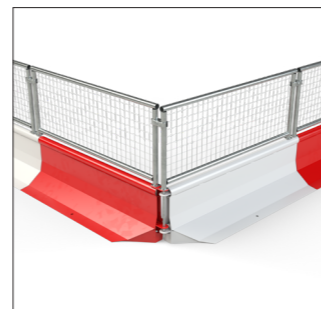
Male Type 2 Section



## CORNER SECTIONS SPECIFICATIONS

Product ID	MTS200100	MTS200105	MTS200120	MTS200125
Type	Female Type 1	Female Type 1	Male Type 2	Male Type 2
Colour	Red	White	Red	White
Height (mm)	420	420	420	420
Depth (mm)	500	500	500	500
Width (mm)	1567	1567	1582	1582
Weight (kg)	43	43	43	43

Manta barriers functioning at 90° degree angle with fence



## MANTA BARRIER END SECTIONS

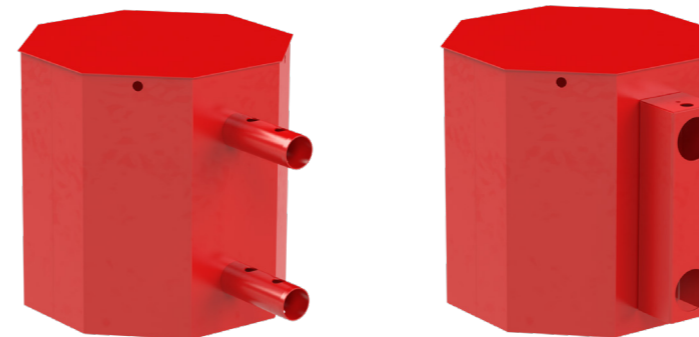
A run of Manta Barriers can be neatly finished off by using our specially designed end section unit, the finishing section is available for both male and female connections and ensures there are no unwanted edges that could potentially be hazardous.

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.

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.

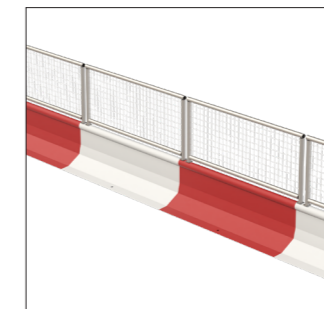
By using the pedestrian fence extension you have the reassurance of knowing the extra height achieved will reduce the risk of a passer-by perimeter breach.

## 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



## 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

## 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

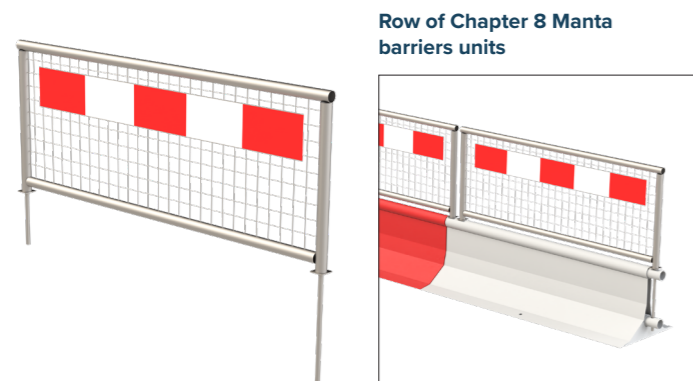
This enhanced version of the 1.5m pedestrian fence has high visibility and highly reflective red and white markings.

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.

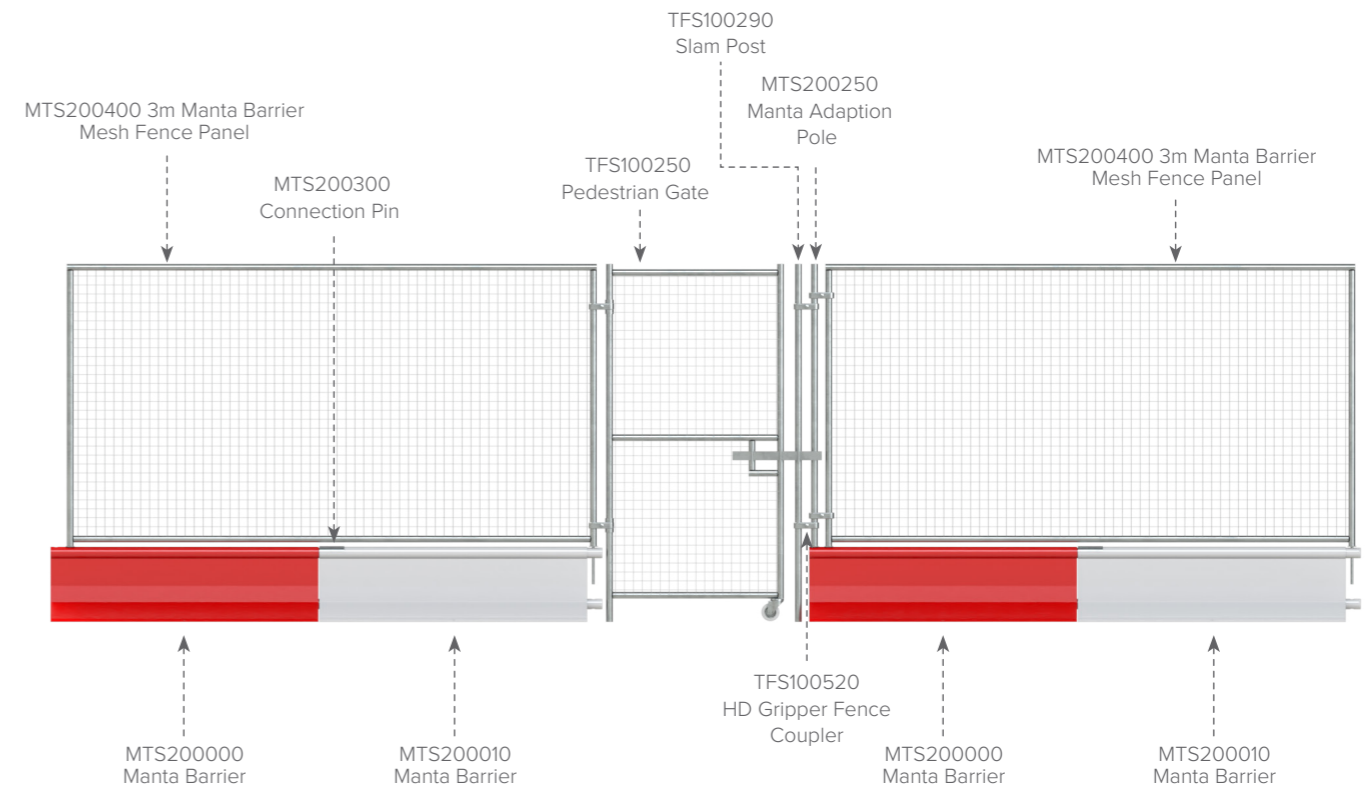
## KEY FEATURES

- > 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



HIGH VISIBILITY 1.5M PEDESTRIAN FENCE SPECIFICATION	
Product ID	MTS200500
Height (mm)	580
Depth (mm)	38
Width (mm)	1463
Weight (kg)	6

## MANTA BARRIER PEDESTRIAN GATE & FENCING



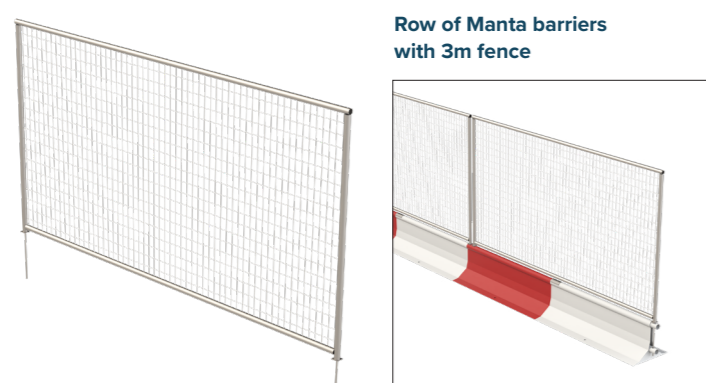
## MANTA BARRIER 3M FENCE

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.

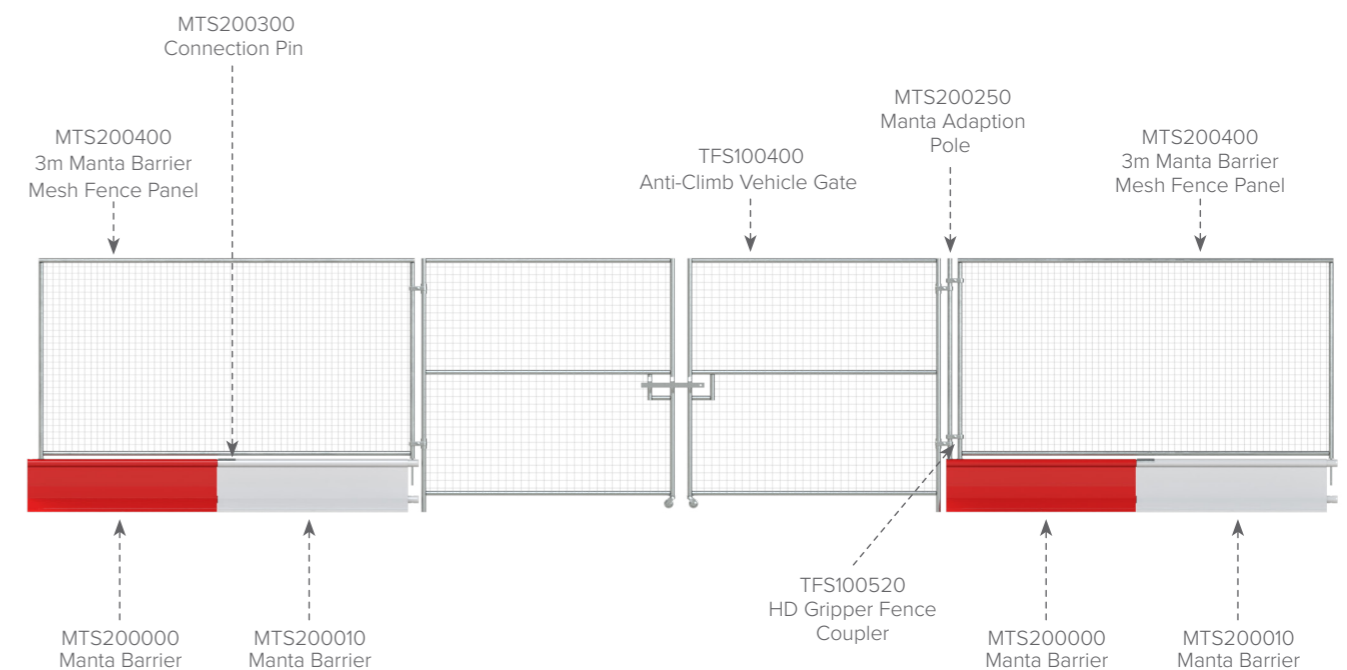
## KEY FEATURES

- > 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



3M FENCE SPECIFICATION	
Product ID	MTS200400
Height (mm)	1580
Depth (mm)	38
Width (mm)	2968
Weight (kg)	15

## MANTA BARRIER VEHICLE GATE & FENCING

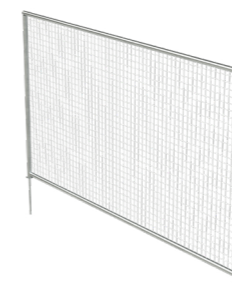


**MANTA BARRIER - BASE UNIT**



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

**3M FENCE - BASE UNIT**



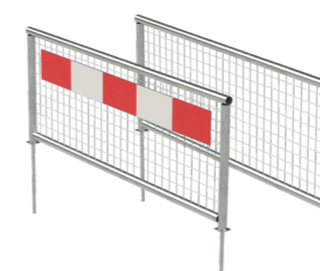
Product ID	MTS200400
Height (mm)	1580 (2000 installed)
Depth (mm)	38
Width (mm)	2968
Weight (kg)	15

**MANTA CORNER - FEMALE TYPE 1**



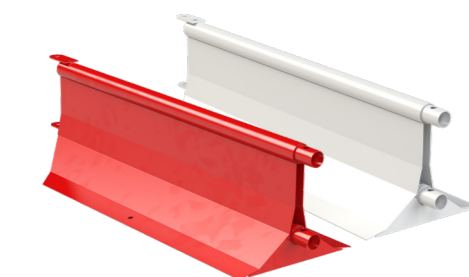
Product ID	MTS200100 (Red), MTS200105 (White)
Height (mm)	420
Depth (mm)	500
Width (mm)	1567
Weight (kg)	43

**1.5M PEDESTRIAN FENCES**



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

**MANTA CORNER - MALE TYPE 2**



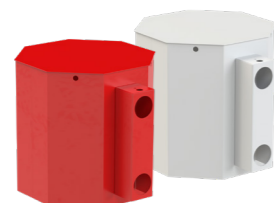
Product ID	MTS200120 (Red), MTS200125 (White)
Height (mm)	420
Depth (mm)	500
Width (mm)	1582
Weight (kg)	43

**CONNECTING PIN**



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

**MANTA END - FEMALE**



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

**CONNECTING PIN - SINGLE PIN**



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

**MANTA END - MALE**



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

**ADAPTION POLE - 2M**



Product ID	MTS200250
Height (mm)	1950
Depth (mm)	50
Width (mm)	50
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 (±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.

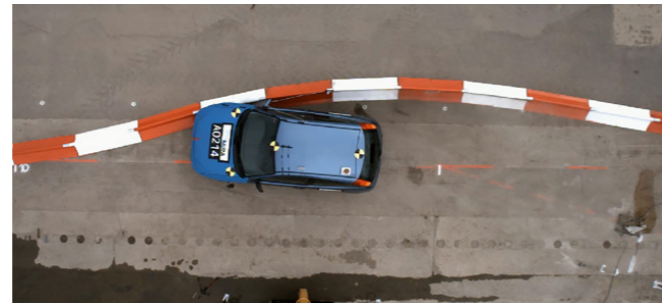
## CRASH TESTED SUMMARY

- 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 adjoining Manta barriers without any add-ons, two adjoining Manta barriers with the lightweight pedestrian fence add-on, and two adjoining 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.

