

MANTA[®] BARRIER

Durable, All-Weather Road Safety
& Construction Barriers







PRODUCT INFO

With its flexible design, the original Manta 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, and is available 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.

NO CONNECTION BARS NEEDED

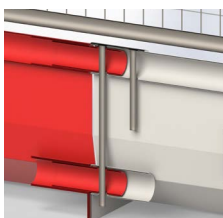
The Barrier maintains its tested safety standards when also supporting either a 1.5m long pedestrian fence or 3m long temporary fence, which eliminates the need for a connection bar.

KEY FEATURES

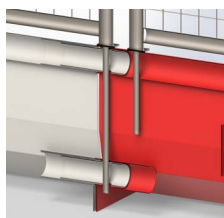
- Cost-effective solution
- Up to 144m per load
- Tested as free-standing with no ground drilling needed
- Class A Wind Tunnel Test Certification
- Crash tested T2 W7 of BS EN 1317:2010
- Quick and easy to assemble, install and reposition
- Lightweight & stackable for easy transportation and storage
- Compatible with top-section safety fencing for added safety and perimeter protection
- Available in 2 high visibility colours as well as unpowder-coated



Connection pin



Using pin plate



Using fence add-on bar extensions



Crash tested to
T2 W7 levels

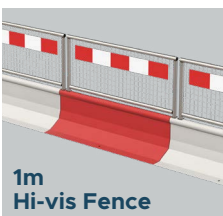


Class A wind
tunnel tested

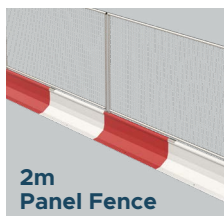
FENCING OPTIONS



1m
Ped Fence



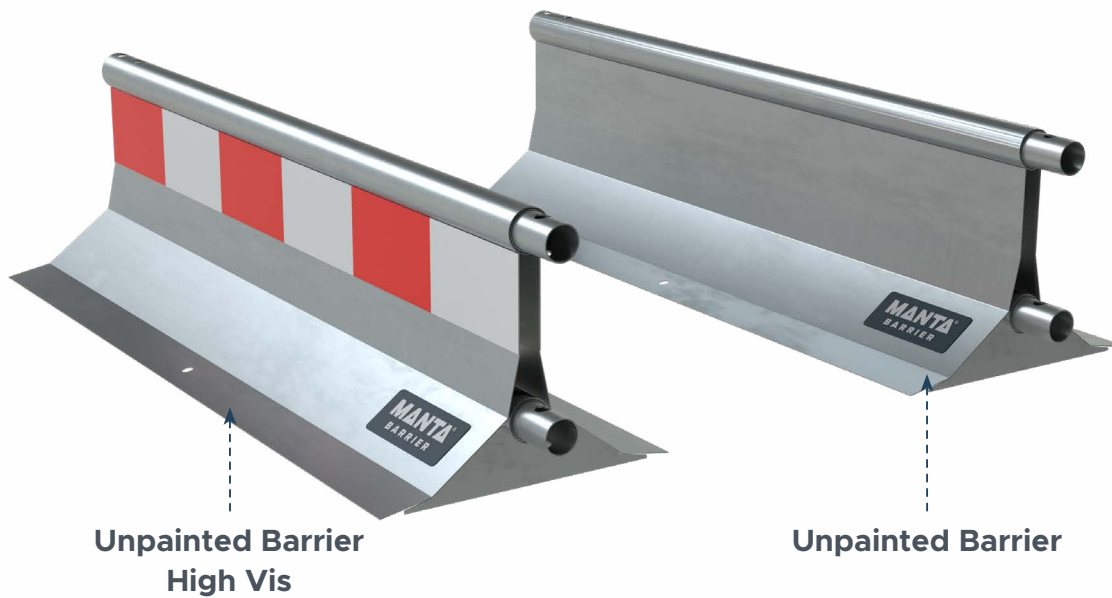
1m
Hi-vis Fence



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



UNPAINTED BARRIERS

Offering the same durable, long-lasting design as the original, without the powder coated finish.

Made from recyclable galvanised steel, it is built to withstand tough conditions and is suitable for repeated repositioning and reuse throughout the life of your project.

This model is available unpowder-coated or with a high-visibility red and white stripe option. Each unit securely connects to the next using a removable steel pin, allowing you to create a continuous and adaptable barrier system tailored to your site requirements.

DURABILITY

Manta Barriers are manufactured from hot-dipped galvanised steel which means they are durable and highly resistant to corrosion, enabling a rugged and long lasting solution.

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 T2 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 unpainted and with a high visibility stripe



Crash tested to
T2 W7 levels

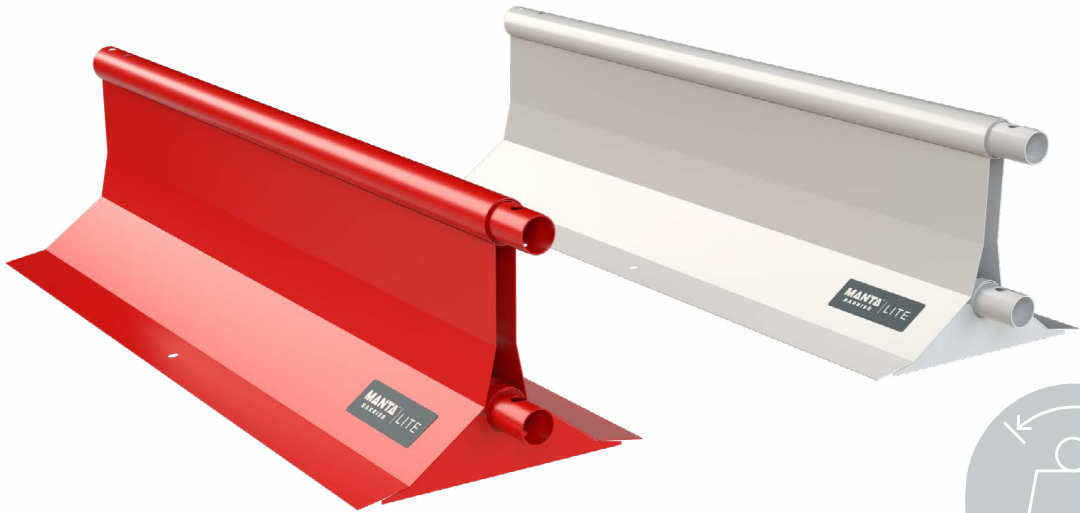


Class A wind
tunnel tested



SPECIFICATIONS

Product ID	MTS190020	MTS190030
Colour	Hi Vis Striped	Unpainted
Height (mm)	420	420
Depth (mm)	500	500
Width (mm)	1500	1500
Weight (kg)	48	48



MANTA LITE

Manta Lite is the lighter evolution of our barrier system, designed for easier handling and faster installation. Its reduced weight makes repositioning less taxing for site teams, improving safety and efficiency during setup.

The lightweight design also makes it a practical, cost-effective alternative to water-filled barriers. It offers rapid deployment where crash-tested protection is not required.

Manufactured in the UK from recyclable, galvanised steel, Manta Lite is available both powder-coated for high visibility and un-powder coated, whilst maintaining long-term durability. Each connects securely with a removable steel pin, creating a continuous system ready for reuse across multiple projects.

KEY FEATURES

- Lighter-weight solution
- Cost-effective solution
- Up to 144m per load
- Quicker and easier 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 as well as unpowder-coated

POWDER COATING

The red and white alternating design of the powder coated barriers provide a high visibility safety presence on site. The powder coat further enhances its durability and corrosion resistance.



SPECIFICATIONS

Product ID	MTS190016 (Red) MTS190018 (White)	MTS190010 (Unpainted) MTS190000 (Hi Vis Stripe)
Colour	Red / White	Unpainted / With Hi Vis Stripe
Height (mm)	420	420
Depth (mm)	500	500
Width (mm)	1500	1500
Weight (kg)	26.2	26.2



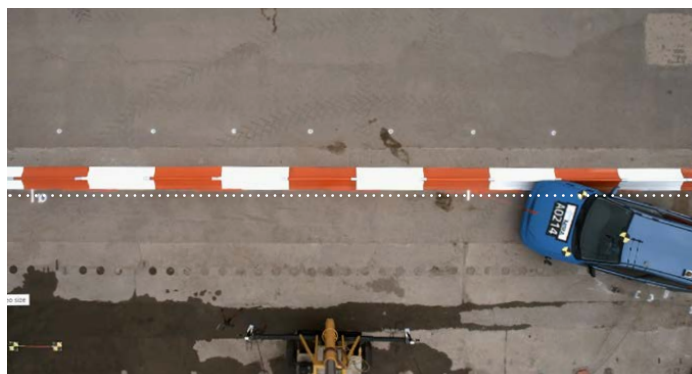
MANTA BARRIER CRASH TESTED

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 report summarises the crash test by Horiba Mira Ltd, where the Manta Barrier System was tested under BS EN 1317:2010, Test Level TB22, achieving a W7 rating. 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.

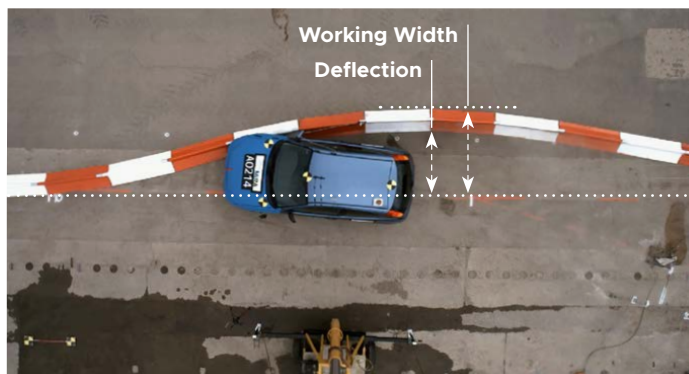
Initial point of impact



CRASH TESTED SUMMARY

- Best possible result for ASI & THIV assessment, achieving an A rating
- Passed TB22 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

Degree of deflection at point of highest force



TYPE OF TEST (TB22)



Test Speed (mph)

50



Vehicle Weight (Tonnes)

1.3



Impact Angle (Degrees)

15.7

WORKING WIDTH



Deflection



Barrier Width



Working Width

Working width indicates how much space is needed behind a barrier to allow it to function as a safety device when impacted. Deflection plus barrier width results in the working width.



Deflection (mm)

1700



Working Width (mm)

2200



Result Band (EN1317 class)

W7

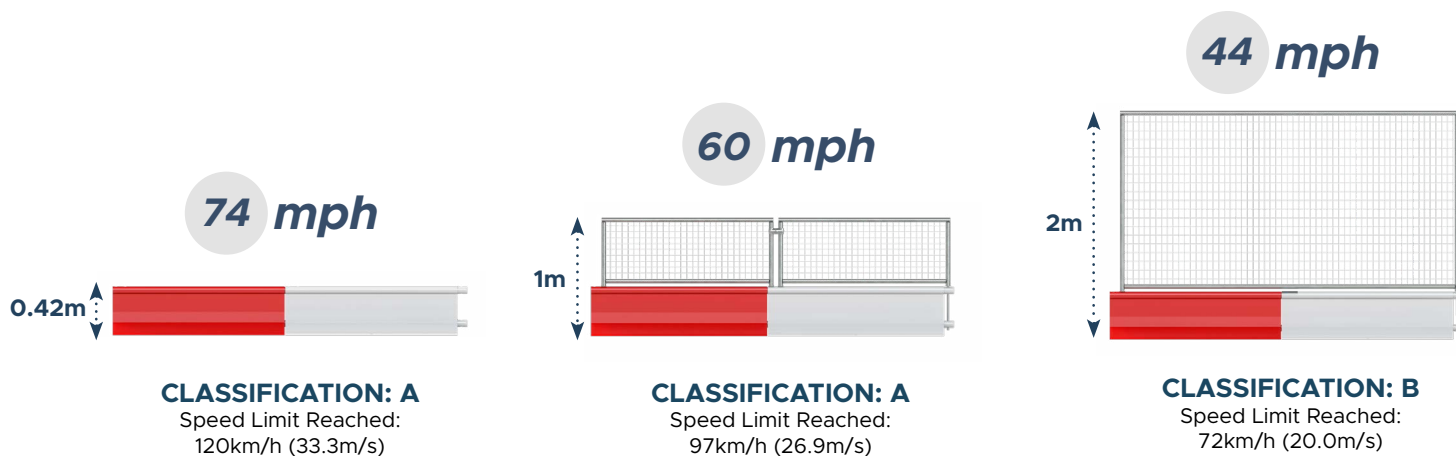
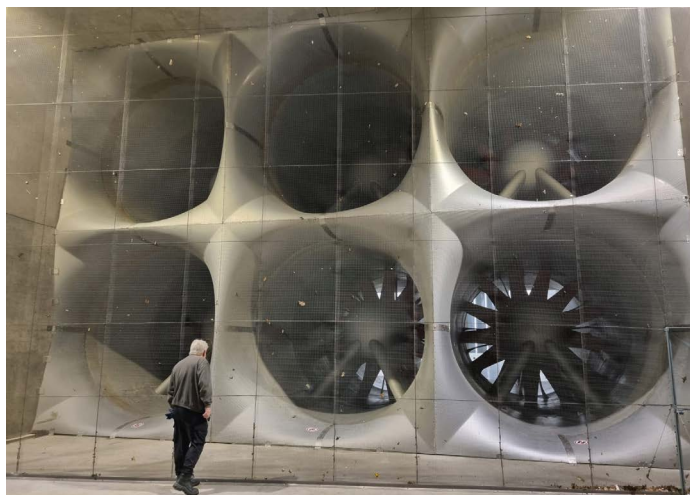


MANTA BARRIER WIND TESTED

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 below.

 Tested Barriers	 Crash Tested	 Wind Tested
MTS200000	✓	✓
MTS200010	✓	✓
MTS190020	✓	✓
MTS190030	✓	✓





IMPORTANT INFORMATION:

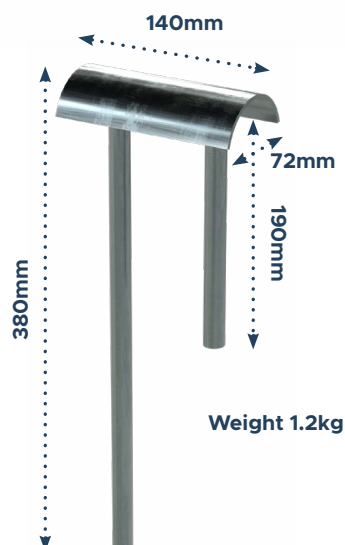
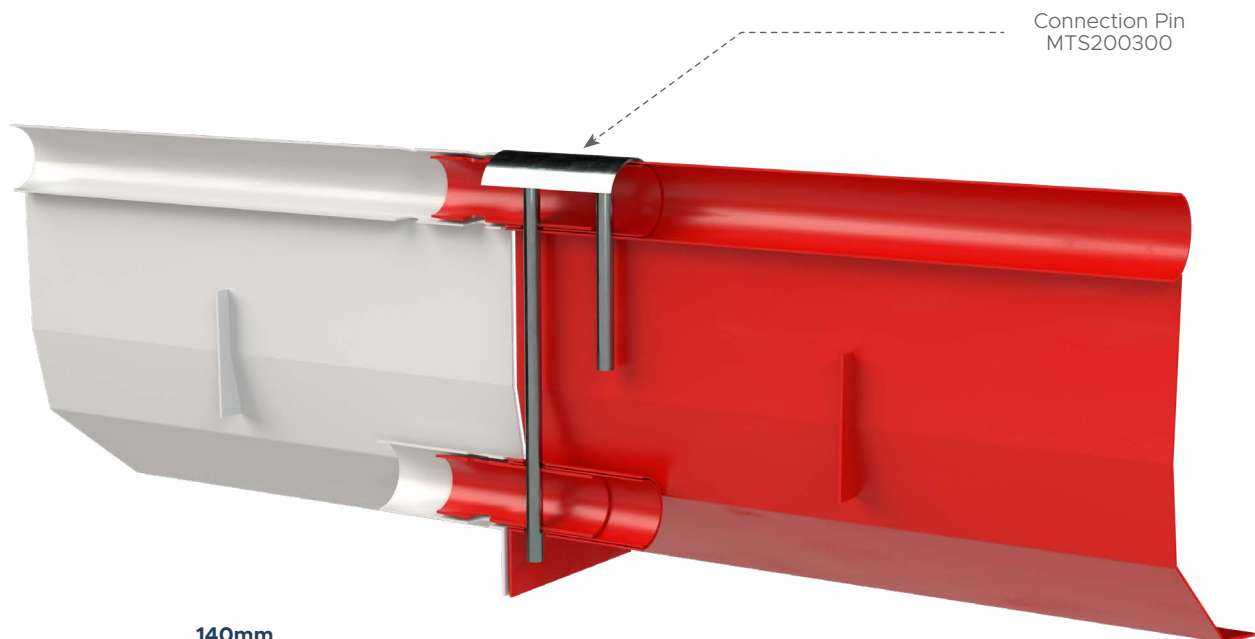
UNMATCHED COMPLIANCE — BUILT IN

The Manta Barrier features a self-contained structural design that removes the need for secondary steel bracing.

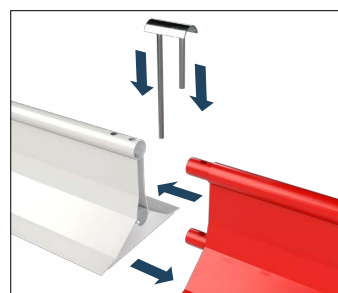
While other steel barrier systems require either a mandatory side or top mounted steel reinforcement bar to remain crash-test compliant, the Manta Barrier requires neither. Full safety certification is achieved solely through the installation of standard connecting pins.

KEY STRUCTURAL & OPERATIONAL BENEFITS

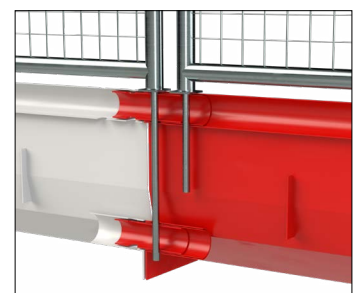
- **Zero Bracing Required:** Achieves rigorous safety certifications without mandatory side-bars or top-bars
- **Continuous Integrity:** Maintains full crash-test standards as a standalone unit or with extended fencing
- **Accelerated Setup:** Uses a lightweight connecting pin to streamline installation times
- **Reduced Transport Demands:** Maximises vehicular transit space by removing bulky secondary steel components
- **Lower Loss Risks:** Simplifies site inventory by eliminating loose peripheral parts
- **Ergonomic Handling:** Minimises heavy lifting for deployment teams to enhance safety



Manta Barriers connected using connecting pins



Manta Barriers connected using fence add-on bar extensions





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.

In addition the end section allows for a nice tidy finish to the end of a Manta Barrier run.

Male End Section



Female End Section



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

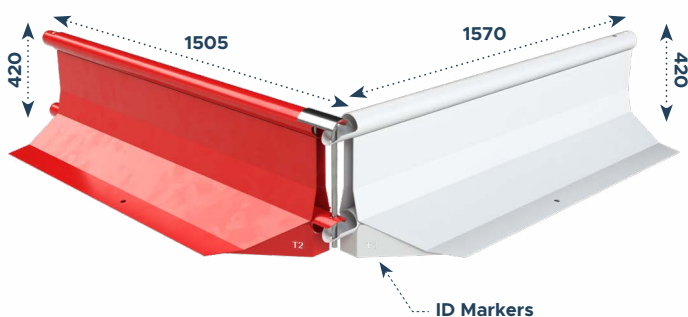
MANTA BARRIER CORNER SECTIONS

With Manta Barriers there is the added ability to rotate units up to 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.

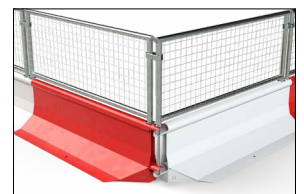
Type 2 Unit

Type 1 Unit



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



Manta Barriers functioning at 90° degree angle with fence

CORNER SECTIONS SPECIFICATIONS

Manta Barrier System Corners

Manta Lite Corners

Product ID	MTS200100	MTS200105	MTS200120	MTS200125	MTS180100	MTS180105	MTS180120	MTS180125
Type	Type 1	Type 1	Type 2	Type 2	Type 1	Type 1	Type 2	Type 2
Colour	Red	White	Red	White	Red	White	Red	White
Height (mm)	500	500	500	500	500	500	500	500
Depth (mm)	490	490	490	490	490	490	490	490
Width (mm)	660	660	580	580	660	660	580	580
Weight (kg)	43	43	43	43	23	23	25	25



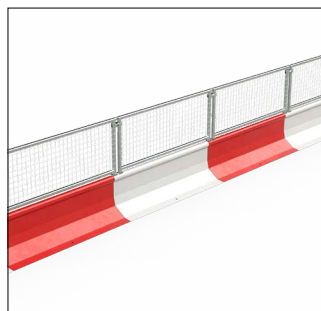
MANTA BARRIER 1.5M PEDESTRIAN FENCE

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.

Row of Manta Barriers
with pedestrian fence



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

1.5M PEDESTRIAN FENCE SPECIFICATION

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

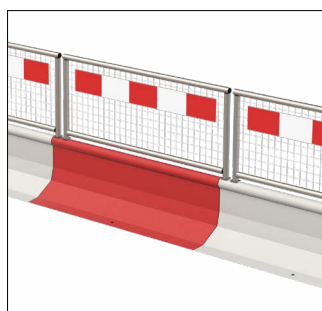
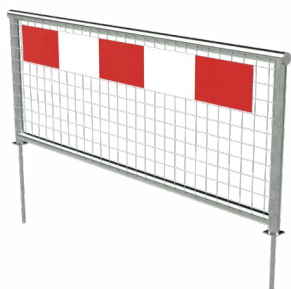
MANTA BARRIER CHAPTER 8 SYSTEM

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 48kg Manta Barrier base unit, this is significant when you consider many Chapter 8 barriers weigh less than 15kg.

Row of Chapter 8 Manta
barriers units



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

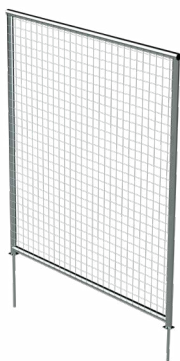
Product ID	MTS200500
Height (mm)	580
Depth (mm)	38
Width (mm)	1463
Weight (kg)	6



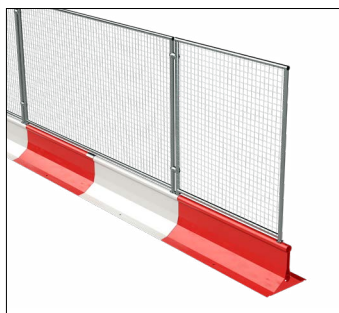
MANTA BARRIER 1.5 x 2M FENCE

The Manta Barrier can fit a lightweight 1.5m x 2m anti-climb fence panel, compatible with our 3m fence panels to create an integrated fence line.

The panels increase the overall barrier height to 2m and are ideal for finishing barrier runs and securing corners. This quick and easy-to-install extension helps create a fully enclosed perimeter with a neat, orderly appearance.



Row of Manta barriers with
1.5 x 2m fence on end position



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
- Reduces the risk of the barrier perimeter being breached
- Quick and easy to install
- For end of barrier runs

1.5 x 2M FENCE SPECIFICATION

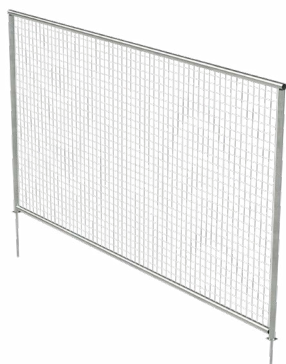
Product ID	MTS200410
Height (mm)	1580
Depth (mm)	38
Width (mm)	1463
Weight (kg)	9

MANTA BARRIER 3M FENCE

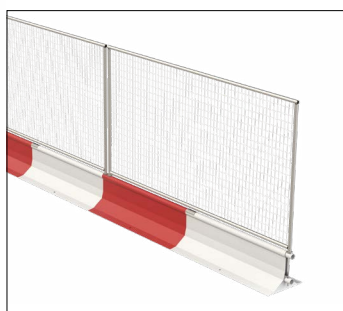
In addition to its stand alone benefits, the Manta Barrier can accommodate one of the lightest 3m anti-climb fence panels on the market, allowing for greater ease when manually handling.

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.



Row of Manta barriers
with 3m fence



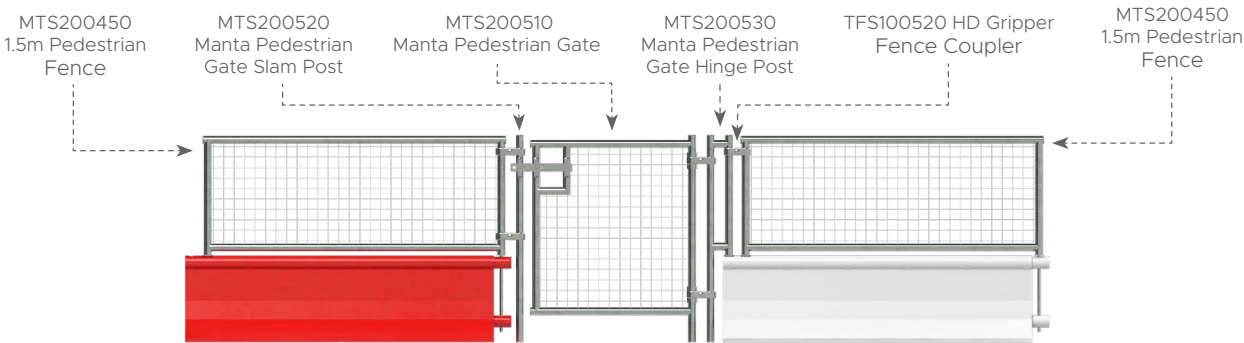
KEY FEATURES

- 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
- Reduces the risk of the barrier perimeter being breached
- Quick and easy to install

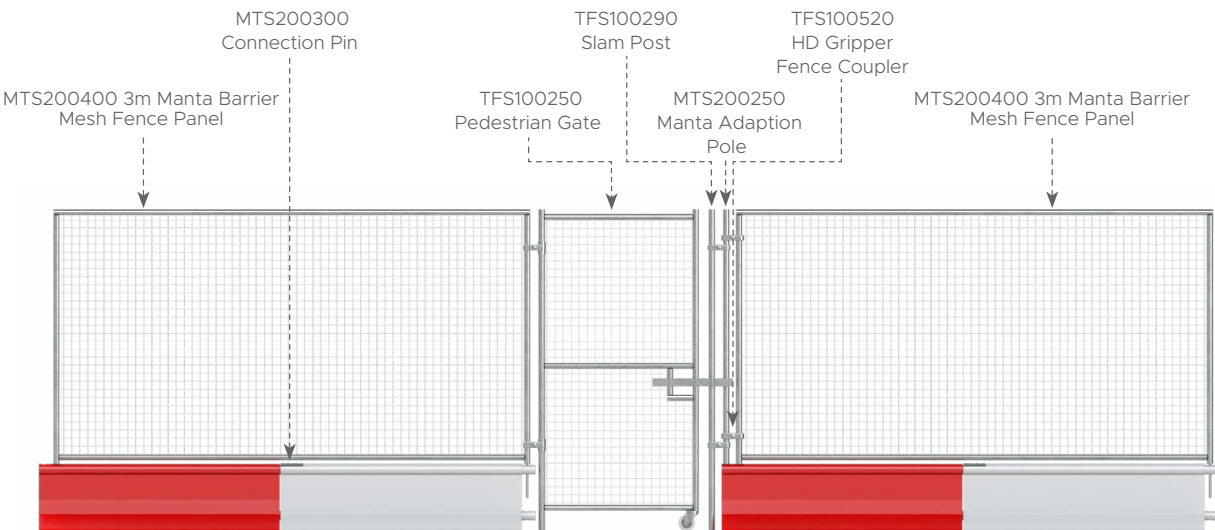
3M FENCE SPECIFICATION

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

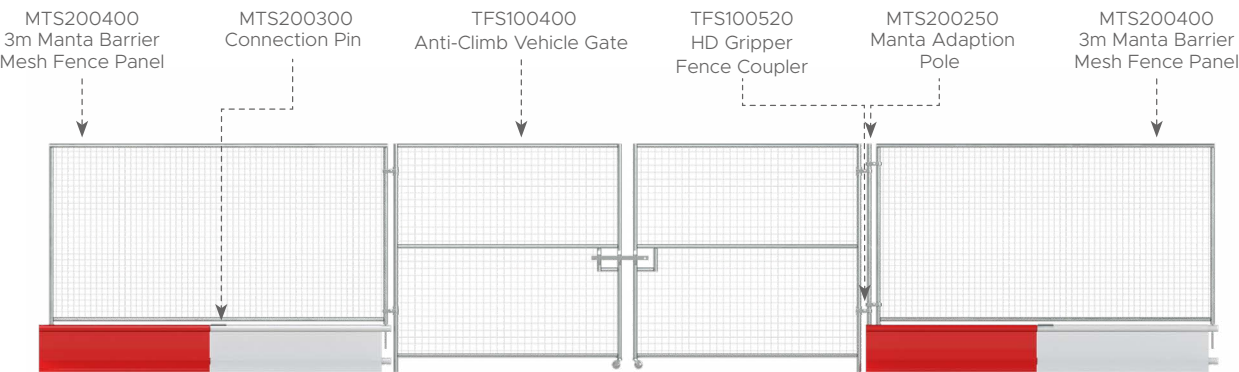
MANTA BARRIER LOW PEDESTRIAN
GATE & FENCING



MANTA BARRIER
PEDESTRIAN GATE & FENCING



MANTA BARRIER
VEHICLE GATE & FENCING





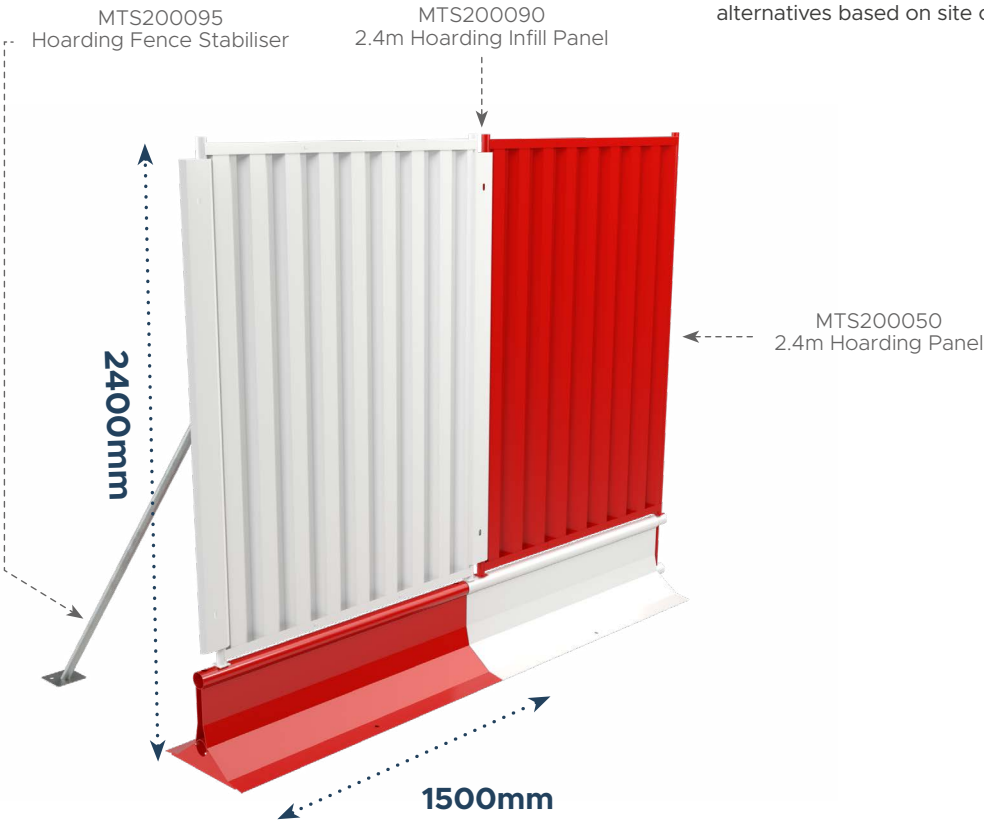
MANTA BARRIER HOARDING

Our hoarding come in to sizes 2m and 2.4m and can be install on any hard footing, making it ideal for roadworks and site perimeters.

It has a sturdy corrugated galvanised steel construction and bright powder coated colours to demark and obscure site boundary alongside offer the crash protection of the manta barrier. The hoarding utilises the same slot in installation as the rest of the manta's fencing option so installation is quick and easy.

KEY FEATURES

- Increases overall height to 2m or 2.4m
- Legs double up as connection pins
- Corrugated steel construction
- Quick and easy to install
- Provides protection and obscures sight lines
- Manufactured using galvanised steel
- Powder coated in hi-vis red and white or galvanised
- Reduces the risk of the barrier perimeter being breached
- Requires to 3 couplers per panel to install
- Use ground chemical anchors of at least M12 x 110mm or suitable alternatives based on site conditions.



2m and 2.4m Hoarding panels



Rear of Hoarding panels with Hoarding Fence Stabiliser



HOARDING FENCE SPECIFICATIONS

Product ID	MTS200020 2m Hoarding Panel	MTS200050 2.4m Hoarding Panel	MTS200080 2m Hoarding Infill Panel	MTS200090 2.4m Hoarding Infill Panel	MTS200095 Hoarding Fence Stabiliser
Height (mm)	1580	1980	1450	1850	1905
Depth (mm)	38	38	1.2	1.2	38
Width (mm)	1463	1463	140	140	130
Weight (kg)	19	23	3	3	2



MANTA BARRIERS



Product ID



Product



Colour



Height (mm)



Depth (mm)



Width (mm)



Weight (kg)

MTS200000

Manta Base
Unit Red

Red

420

500

1500

48

MTS200010

Manta Base Unit
White

White

420

500

1500

48

MTS190020

Manta
Unpainted / Hi Vis

Unpainted / Hi Vis
Striped

420

500

1500

48

MTS190030

Manta
Unpainted

Unpainted

420

500

1500

48

MTS190016

Manta Lite Base
Unit Red

Red

420

500

1500

26.2

MTS190018

Manta Lite Base
Unit White

White

420

500

1500

26.2

MTS190000

Manta Lite
Unpainted / Hi Vis

Unpainted / Hi Vis
Striped

420

500

1500

26.2

MTS190010

Manta Lite
Unpainted

Unpainted

420

500

1500

26.2



MANTA BARRIER - BASE UNIT



Product ID	MTS200000 (Red), MTS200010 (White), MTS1900016 (Lite Red), MTS1900018 (Lite White)
Height (mm)	420
Depth (mm)	500
Width (mm)	1500
Weight std (kg)	48
Weight Lite (kg)	26.2

MANTA CORNER - TYPE 1



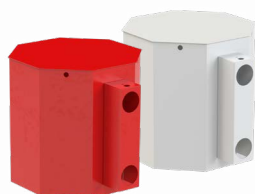
Product ID	MTS200100 (Red), MTS200105 (White)
Height (mm)	420
Depth (mm)	500
Width (mm)	1570
Weight (kg)	43

MANTA CORNER - TYPE 2



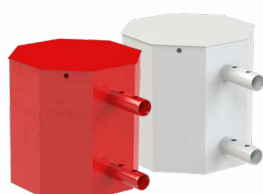
Product ID	MTS200120 (Red), MTS200125 (White)
Height (mm)	420
Depth (mm)	500
Width (mm)	1505
Weight (kg)	43

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

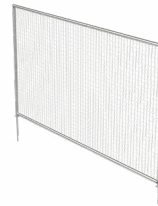


MANTA BARRIER - BASE UNIT



Product ID	MTS190030 (Unpainted), MTS190020 (Hi Vis), MTS1900010 (Lite Unpainted), MTS1900000 (Lite Hi Vis)
Height (mm)	420
Depth (mm)	500
Width (mm)	1500
Weight std (kg)	48
Weight Lite (kg)	26.2

3 X 2M FENCE



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

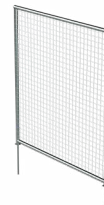
MANTA CORNER - TYPE 1



Product ID	MTS200096 (Hi Vis), MTS200098 (Unpainted)
Height (mm)	420
Depth (mm)	500
Width (mm)	1570
Weight (kg)	43

*Also available in Lite

1.5 X 2M FENCE



Product ID	MTS200410
Height (mm)	1580 (2000 installed)
Depth (mm)	38
Width (mm)	1463
Weight (kg)	9

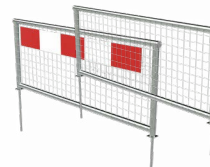
MANTA CORNER - TYPE 2



Product ID	MTS200106 (Hi Vis), MTS200108 (Unpainted)
Height (mm)	420
Depth (mm)	500
Width (mm)	1505
Weight (kg)	43

*Also available in Lite

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 END - MALE & FEMALE



Product ID	MTS200128 (Male)	MTS200188 (Female)
Height (mm)	500	500
Depth (mm)	490	490
Width (mm)	660	580
Weight (kg)	17	19

CONNECTING PIN



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

MANTA LIFTING BAR



Product ID	MAS190640
Height (mm)	161
Depth (mm)	16
Width (mm)	600
Weight (kg)	1

CONNECTING PIN - SINGLE PIN



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



2M HOARDING PANEL



Product ID	MTS200020 (Unpainted), MTS200030 (Red) MTS200040 (White)
Height (mm)	1580 (2000 installed)
Depth (mm)	38
Width (mm)	1463
Weight (kg)	23

PEDESTRIAN GATE LEAF



Product ID	MTS200510
Height (mm)	1000
Depth (mm)	38
Width (mm)	800
Weight (kg)	6

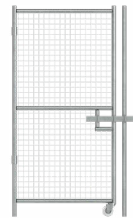
*Includes:
MTS200530 Pedestrian Gate Hinge Post
MTS200520 Pedestrian Gate Slam Post

2.4M HOARDING PANEL



Product ID	MTS200050 (Unpainted), MTS200060 (Red) MTS200070 (White)
Height (mm)	1980 (2400 installed)
Depth (mm)	38
Width (mm)	1463
Weight (kg)	23

ANTI-CLIMB PEDESTRIAN GATES



Product ID	TFS100200
Height (mm)	2000
Depth (mm)	40
Width (mm)	1000
Weight (kg)	10

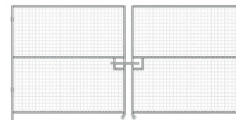
*Includes:
TFS100290 Slam Post

2M HOARDING INFILL PANEL



Product ID	MTS200080
Height (mm)	1450
Depth (mm)	1.2
Width (mm)	140
Weight (kg)	3

ANTI-CLIMB VEHICLE GATES



Product ID	TFS100320
Height (mm)	2000
Depth (mm)	40
Width (mm)	4000
Weight (kg)	28

*Available in 4m - 7m widths and various finishes to suit

2.4M HOARDING INFILL PANEL



Product ID	MTS200090
Height (mm)	1850
Depth (mm)	1.2
Width (mm)	140
Weight (kg)	3

ADAPTION POLE - 2M



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

HOARDING FENCE STABILISER



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

COUPLERS



Product ID	TFS100500 (Std Fence Coupler)	TFS100520 (HD Gripper Fence Coupler)
Height (mm)	26	35
Depth (mm)	78	55
Width (mm)	136	140
Weight (kg)	0.21	0.4



1

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.

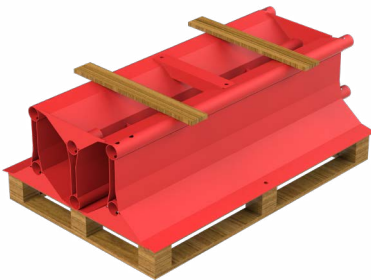


2

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.

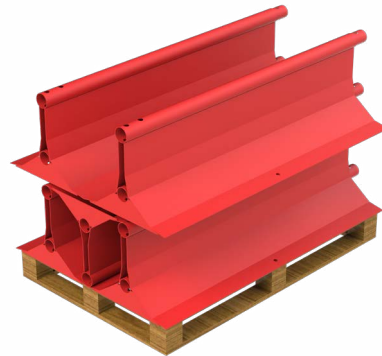
The exposed base of this barrier must be even and level in readiness for the next processes.



3

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

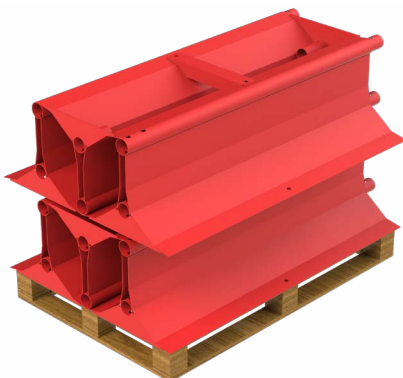
These lengths of wood should be placed approximately 15cm within each end of the three stacked barriers, and be placed in such a way the centre of the wood is central to the base of the third barrier and parallel to the pallet beneath.



4

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.

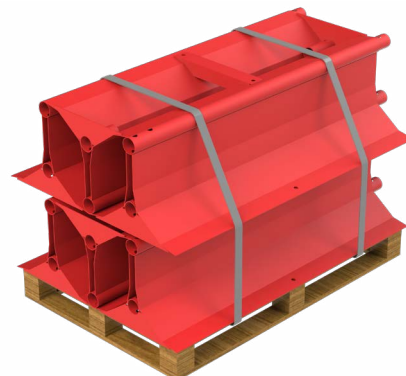


5

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.



6

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.

