Defender 50
Crash Barrier

Specification Sheet
DFS160000

28/07/25

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FACILITIES

Defender 50 Crash Barrier

The UK's only 50 mph crash-tested barrier system with top fencing compatibility.

Engineered for high-impact environments, the Defender 50 Crash Barrier is a robust, water-filled system designed to deliver maximum protection in temporary traffic and site security applications. Crash tested to 50 mph (80 km/h) with top fence panels in place, it offers exceptional performance and versatility where traditional barriers fall short. Made from UV-stabilised polymer, each unit holds 400 litres for excellent ballast and stability. Features include forklift entry points for easy handling and a sump plug for quick emptying.

Ideal for road traffic management, construction sites, or perimeter control, the Defender 50 is a durable, modular solution that prioritises safety, performance, and ease of use in high-risk or high-speed environments.

Key Features

- Crash tested to 50 mph (W8)
- Rapid install – secure barriers with two steel plates and a central steel tube
- Compatitable with Double Top & Mini Toppers for additional height
- Compatitable with Mesh and Hoaring Panels
- 138° angular rotation – ideal for curved or non-linear layouts
- Top-fill design – with secure cap for easy water filling
- Forklift compatible base – for simple movement and positioning
- Embossed branding – customise barriers with your corporate logo

Fixing plate on each side

Installed with double top fencing

Working width 2110mm
Full width 2340mm
800mm
350mm
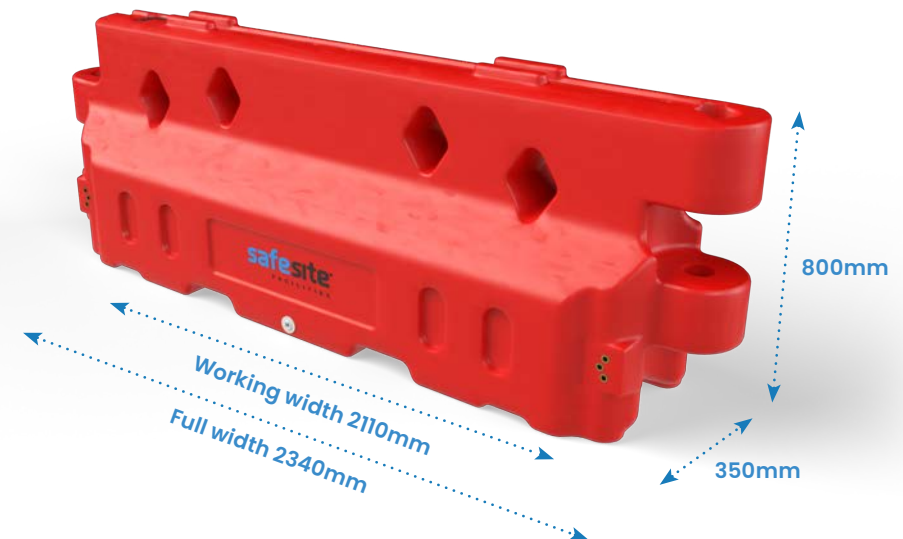
Description	Size (mm)	Weight (kg)	Weight Filled (kg)
DFS160000 - Defender 50 Barrier - Red	H800 x W2340 x D350	40	400
DFS160010 - Defender 50 Barrier - White	H800 x W2340 x D350	40	400
DFS160200 - Defender 50 Barrier Fixing Plate	H1050 x W1938 x D40	17.5	-
DFS160250 - Defender 50 Barrier Connecting Tube	H1050 x W1938 x D40	17.5	-

Crash Testing

The Defender 50 barrier system with integrated fencing was tested under controlled crash conditions in accordance with the BS EN 1317 standard for Containment Level N1.

Unique in its class, the Defender 50 has been crash tested to 50 mph (80 km/h) (W8) with top fence panels in place, offering unrivalled performance and versatility where traditional barriers fall short.

The Defender 50 was tested under these specific conditions:

> Impact angles within tolerance - 20° impact

> Vehicle mass: 1,500kg

Crash Test Summary

Vehicle:

> Vehicle did not breach system

> Vehicle stayed on correct side & within CEN box

> Vehicle did not roll

Device:

> System did not penetrate Vehicle

Result

> Impact severity level rating - **A**

> Impact speed - 81.3 kmh / 50.51 mph (W8)

**Initial point of impact**

Aftermath

Fencing Accessories

Compatitable with the **Double Top Panel** which acheives a total height of **1.8m**.

Also compatitable **Mini Double Top Panel** which achieves a full total height of **1.33m.**

Installed with Double Top Panels

Description	Size (mm)	Weight (kg)
SBS201140 - Double Top Panel - Red	H1000 x W1115 x D350	4.4
SBS201145 - Double Top Panel - White	H1000 x W1115 x D350	4.4
SBS201160 - Mini Double Top Panel - Red (W/ Reflecrive Strip)	H535 x W1115 x D60	3
SBS201165 - Mini Double Top Panel - White (W/ Reflecrive Strip)	H535 x W1115 x D60	3
SBS201170 - Mini Double Top Panel - Red (W/O Reflecrive Strip)	H535 x W1115 x D60	3
SBS201175 - Mini Double Top Panel - White (W/O Reflecrive Strip)	H535 x W1115 x D60	3

535mm

60mm

1115mm

1000mm

60mm

1115mm
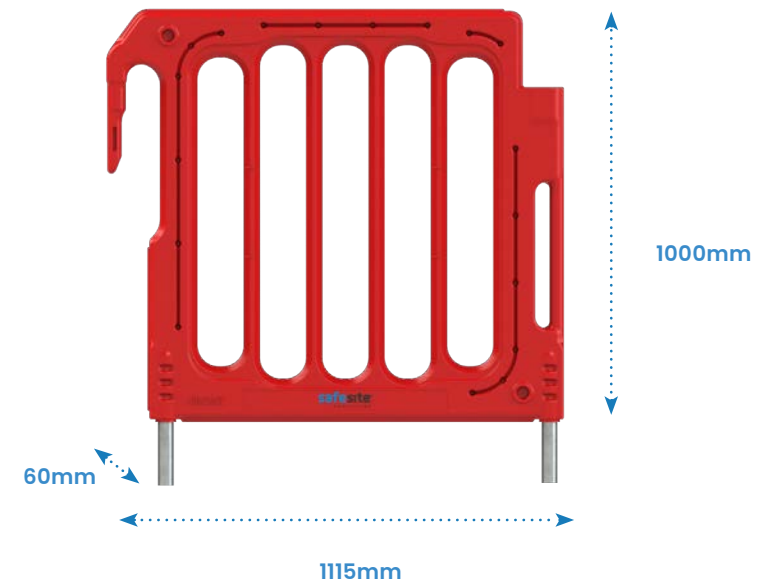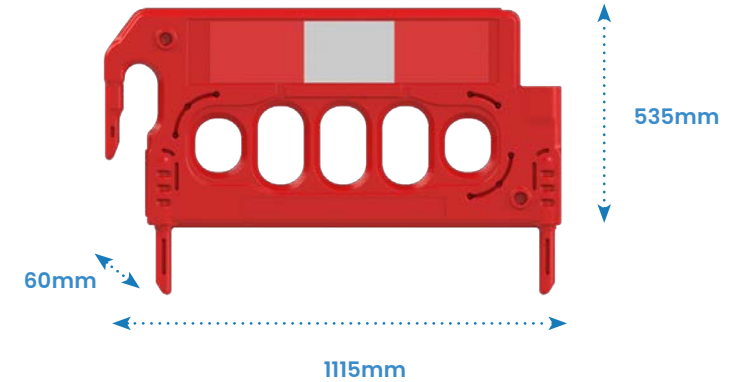
Fencing & Hoarding

The Defender 50 can easily accommodate hoarding and mesh fencing toppers, offering a total height of 2.25m. With simple connector posts and fixings that slot into the top of each water-filled unit, mesh panels add anti-climb security while maintaining sightlines, or hoarding panels can be used for privacy and branding.

No heavy machinery is required, and the added height ensures the Defender 50 delivers both crash protection and adaptable site boundary control.

Description	Size (mm)	Weight (kg)
DFS160320 - 2m Mesh Fencing	H1400 x W1934 x D38	8
DFS160300 - 2m Hoarding	H1400 x W1934 x D38	21
DFS160360 - Mesh Extension Panel	H570 x W1934 x D38	6
RBS160400 - Fence Post	H1870 x W175 x D70	9
RBS160700 - Infill Panel	H1360 x W270 x D40	4
RBS160420 - M10 x 40mm fixing sets	H40 x W10	0.45

2m Anti-climb mesh Setup

Mesh and Hoarding setups can be extended with mesh extension

2m Hoarding Setup with infill panels

Technical Details

Double Top Setup

SBS201145 - Double Top Panel - White

SBS201140 - Double Top Panel - Red

Filler
Cap

1800mm

800mm

Working Width 2110mm

Total Width 2340mm

DFS161200- Fixing Plate
With QTY 6x M12 x 50mm
Hex 8 head bolts
(2 sets of plates and
bolts needed)

Drainage Plug

DFS160250
Connecting Tube

350mm
Depth
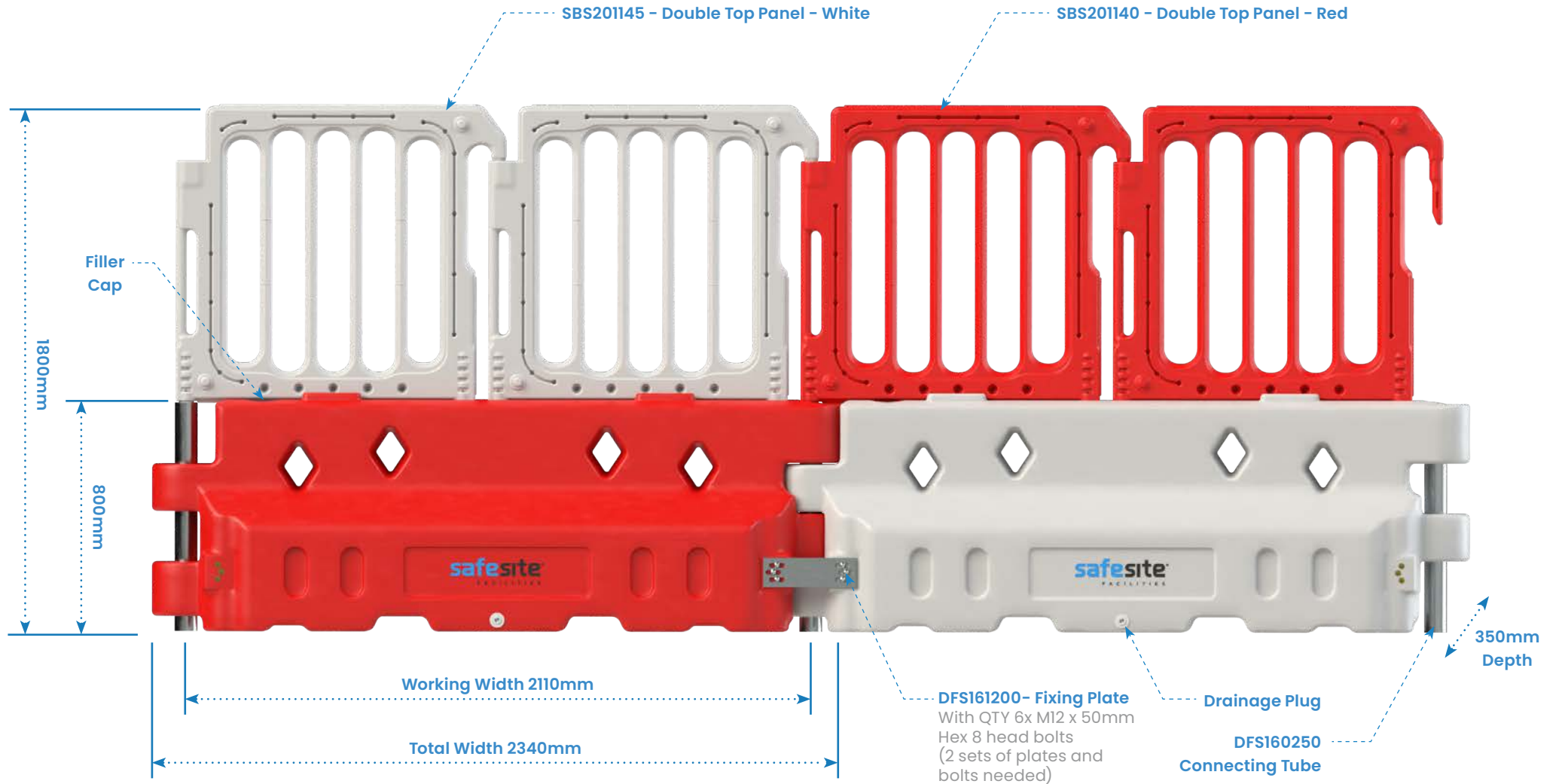
Technical Details

Mini Top Setup

SBS201165 - Mini Double Top Panel - White

SBS201160 - Mini Double Top Panel

Filler Cap

1335mm

800mm

350mm Depth

Working Width 2110mm

Total Width 2340mm

DFS161200- Fixing Plate
With QTY 6x M12 x 50mm
Hex 8 head bolts
(2 sets of plates and
bolts needed)

Drainage Plug

DFS160250
Connecting Tube

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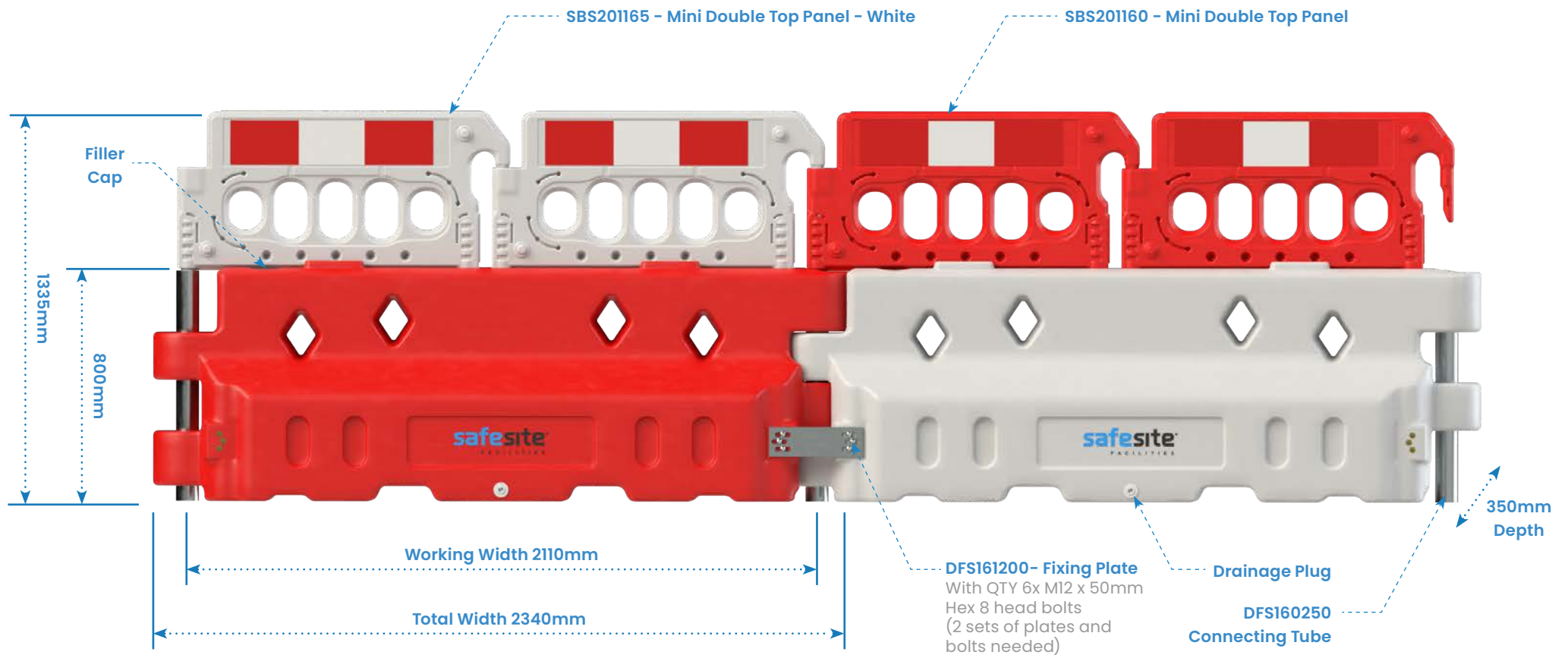
Technical Details

Mesh Fencing Setup

DFS160360 - Mesh Extension Panel

DFS160320 - 2m Mesh Fencing

RBS160400 - Fence Post

RBS160420 - 4x M10 x 40mm bolts, Nuts & washers sets

Filler Cap

2805mm With Extension

2255mm

800mm

350mm Depth

Working Width 2110mm

Total Width 2340mm

DFS161200- Fixing Plate
With QTY 6x M12 x 50mm Hex 8 head bolts (2 sets of plates and bolts needed)
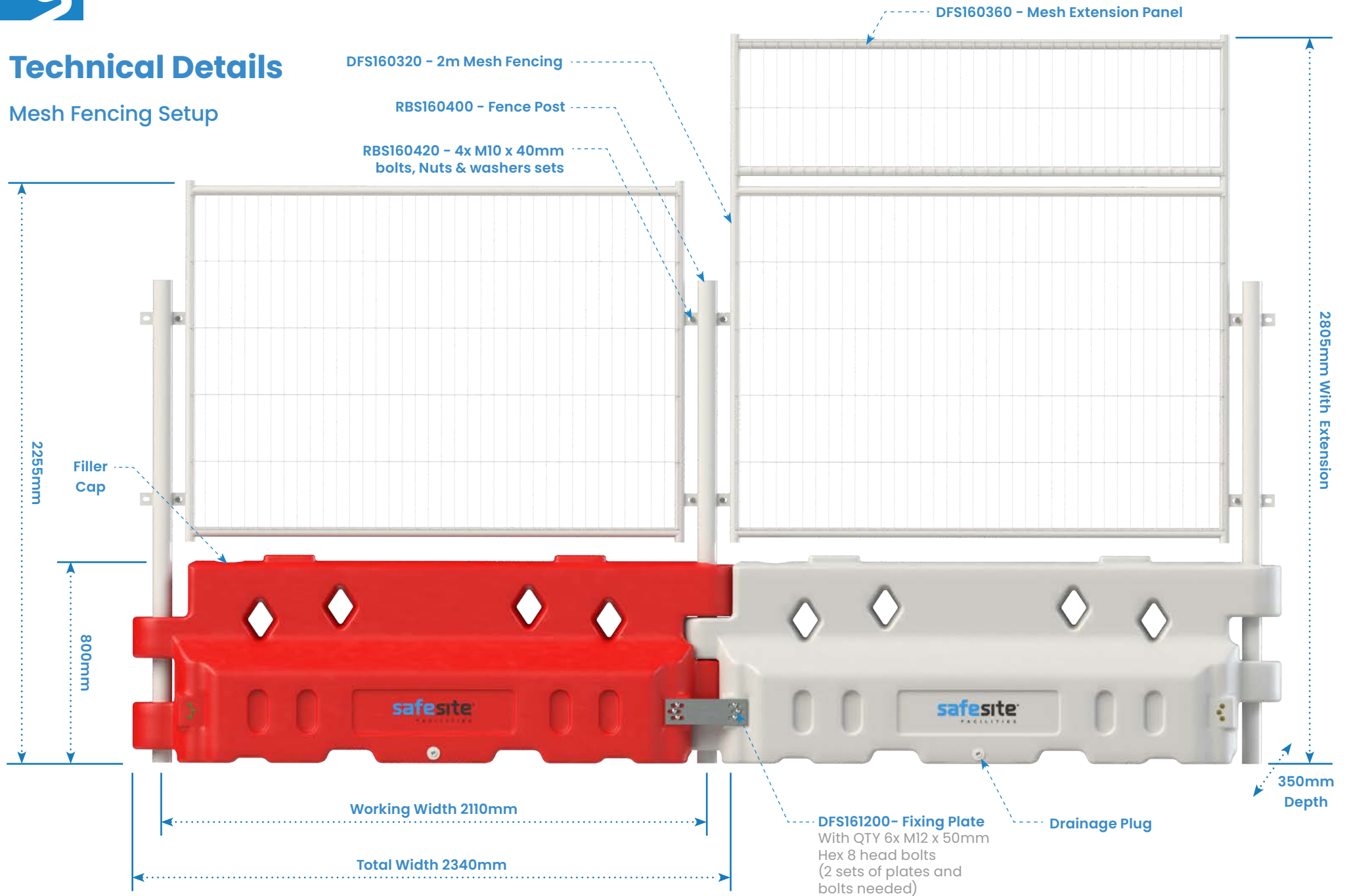
Drainage Plug

Technical Details

Hoarding Setup

DFS160360 - Mesh Extension Panel

DFS160300 - 2m Hoarding

RBS160700 - Infill Panel

RBS160420 - 4x M10 x 40mm bolts, Nuts & washers sets

RBS160400 - Fence Post

Filler Cap

2255mm

2805mm With Extension

800mm

350mm Depth

Working Width 2110mm

Total Width 2340mm

DFS161200- Fixing Plate
With QTY 6x M12 x 50mm Hex 8 head bolts (2 sets of plates and bolts needed)

Drainage Plug

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Installation parts & Fencing Accessories

Defender 50 Crash Water Filled Barrier - Measurements in mm
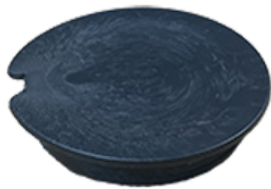
1 Drainage plug
DFS161900
Quantity: 1

Size (mm)	Weight (kg)
–	–

2 Fill cap
DFS161910
Quantity: 1

Size (mm)	Weight (kg)
–	–

3 M12 x 50mm Hex 8 head bolts
Quantity: 12

Size (mm)	Weight (kg)
H20 x D21	–

4 Fixing Plate
DFS161200
Quantity: 2 per barrier

Size (mm)	Weight (kg)
H100 x W314 x D8	1.7

5 Connecting Tube
DFS160250
Quantity: 1 per barrier
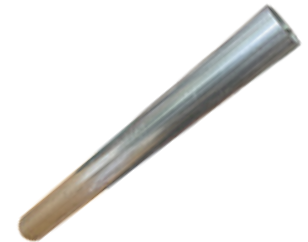
Size (mm)	Weight (kg)
H770 x W76 x D76v	4.2

6 Mini Topper
SBS201160
Quantity: 2 per barrier
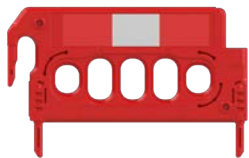
Size (mm)	Weight (kg)
H535 x W1115 x D60	3

7 Double Top
SBS201140
Quantity: 2 per barrier

Size (mm)	Weight (kg)
H1000 x W1115 x D60	4.4

Additional parts for Mesh Fencing

8 **Fence panel**
DFS160320
Quantity: 1 per barrier
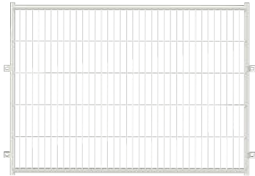
Size (mm)	Weight (kg)
H1400 x W1934 x D38	8

9 **Extension Panel**
DFS160360
Quantity: 1 per barrier

Size (mm)	Weight (kg)
H570 x W1934 x D38	6

10 **Fence Post**
RBS160400
Quantity: 1 per barrier
(replaces connecting tube)

Size (mm)	Weight (kg)
H1870 x W175 x D70	9

11 **M10 x 40mm fixing sets**
RBS160420
Quantity: 4 per barrier

Size (mm)	Weight (kg)
H40 x W10	0.45

Additional parts for Hoarding

12 **Hoarding panel**
DFS160300
Quantity: 1 per barrier

Size (mm)	Weight (kg)
H1400 x W1934 x D38	21

13 **Extension Panel**
DFS160360
Quantity: 1 per barrier
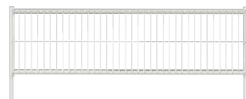
Size (mm)	Weight (kg)
H570 x W1934 x D38	6

14 **Hoarding Infill Panel**
RBS160700
Quantity: 1 per barrier if required

Size (mm)	Weight (kg)
H1360 x W270 x D40	4

15 **Fence Post**
RBS160400
Quantity: 1 per barrier
(replaces connecting tube)

Size (mm)	Weight (kg)
H1870 x W175 x D70	9

16 **M10 x 40mm fixing sets**
RBS160420
Quantity: 4 per barrier

Size (mm)	Weight (kg)
H40 x W10	0.45