

Defender50 Crash Barrier

Specification Sheet
DFS160000

31/07/25

safesite[®]
F A C I L I T I E S



Defender50 Crash Barrier

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

Engineered for high-impact environments, the Defender50 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.

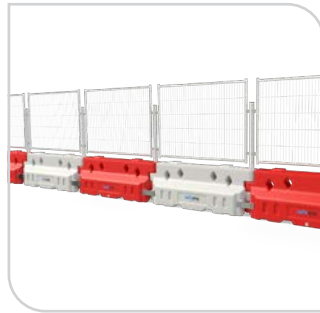
Ideal for road traffic management, construction sites, or perimeter control, the Defender50 is a durable, modular solution that prioritises safety, performance, and ease of use in high-risk or high-speed environments.

Key Features

- Crash tested to 50 mph (W8)
- Rapid install – secure barriers with two steel plates and a central steel tube
- Each barrier comes with connecting tube
- Compatible with Double Top & Mini Toppers for additional height
- Compatible with Mesh and Hoarding 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



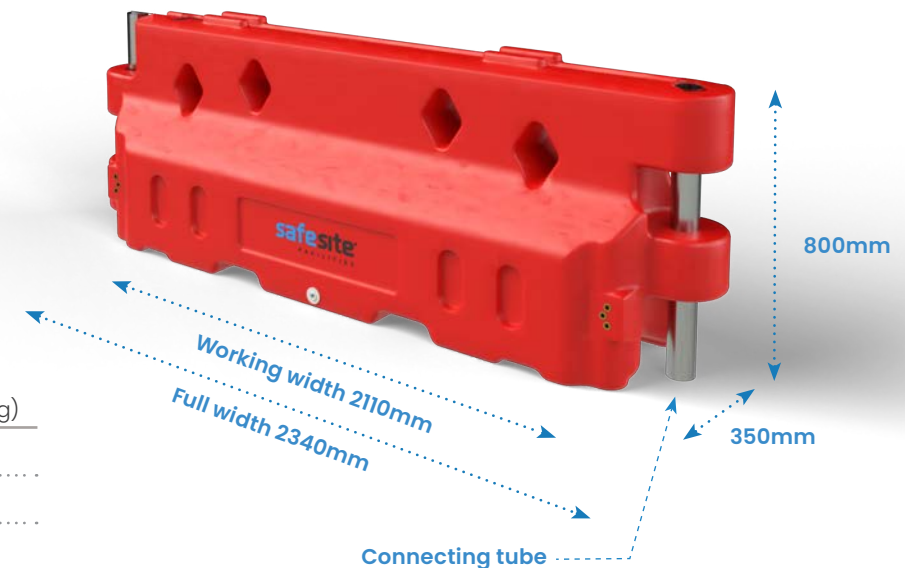
Fixing plate on each side



Mesh & hoarding panel options available



Description	Size (mm)	Working Width (mm)	Weight (kg)	Weight Filled (kg)
DFS160000 – Defender50 Barrier – Red	H800 x W2340 x D350	2110	40	400
DFS160010 – Defender50 Barrier – White	H800 x W2340 x D350	2110	40	400
DFS160200 – Defender50 Barrier Fixing Plate	H1050 x W1938 x D40	–	17.5	–
DFS160250 – Defender50 Barrier Connecting Tube	H1050 x W1938 x D40	–	17.5	–





Crash Testing

The Defender50 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 Defender50 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

Initial point of impact



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)

Aftermath





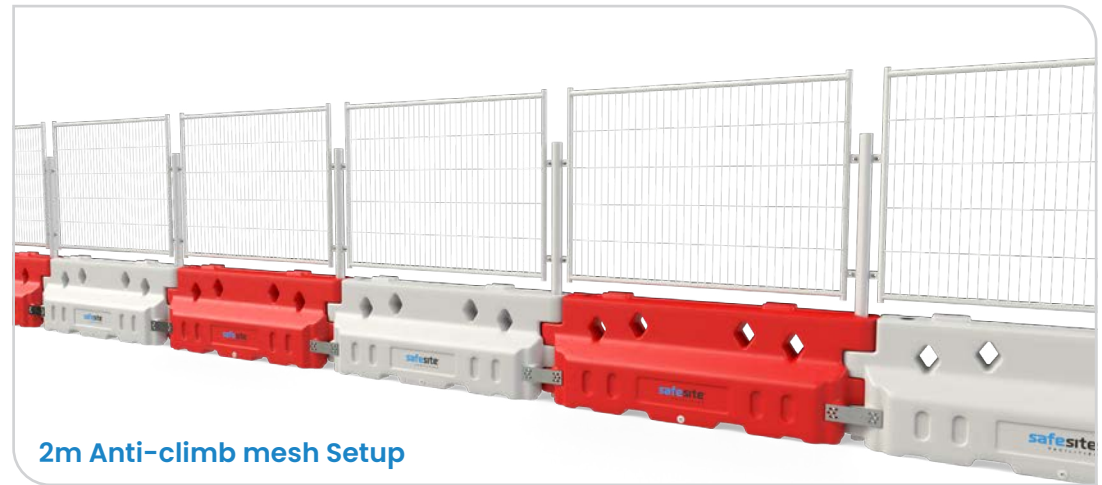
Fencing & Hoarding

The Defender50 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 Defender50 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

Mesh and Hoarding setups can be extended with mesh extension



2m Anti-climb mesh Setup



2m Hoarding Setup with infill panels



Result impact of DoubleTop Panels during crash testing*

*Our Defender50 mesh fencing and hoarding options provides increased stability



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**.



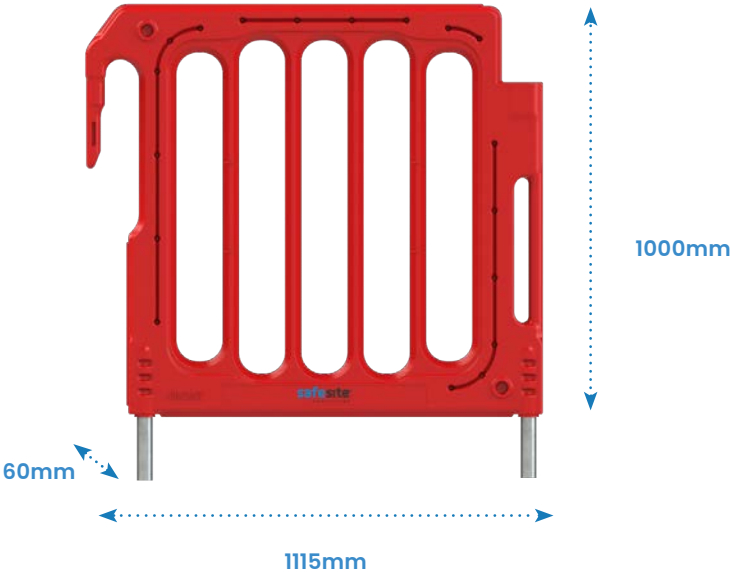
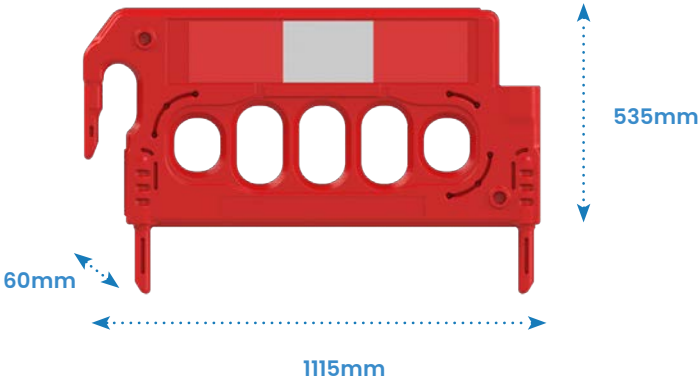
Installed with
DoubleTop Panels



Result impact of DoubleTop
Panels during crash testing*

*Please see our alternative mesh fencing and hoarding options for sturdier solutions

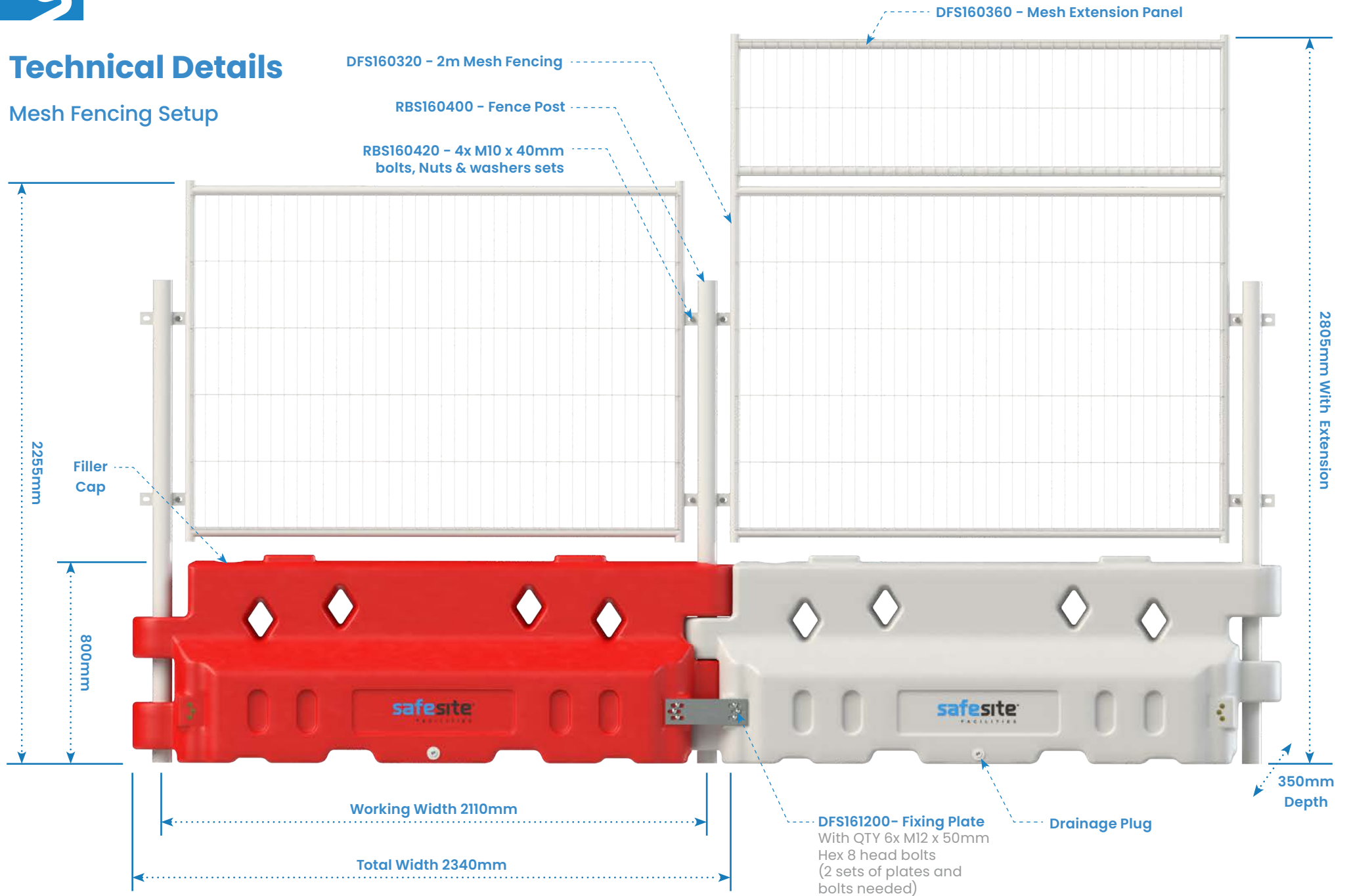
Description	Size (mm)	Weight (kg)
SBS201140 – DoubleTop Panel – Red	H1000 x W1115 x D350	4.4
SBS201145 – DoubleTop Panel – White	H1000 x W1115 x D350	4.4
SBS201160 – Mini DoubleTop Panel – Red (W/ Reflecrive Strip)	H535 x W1115 x D60	3
SBS201165 – Mini DoubleTop Panel – White (W/ Reflecrive Strip)	H535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





Technical Details

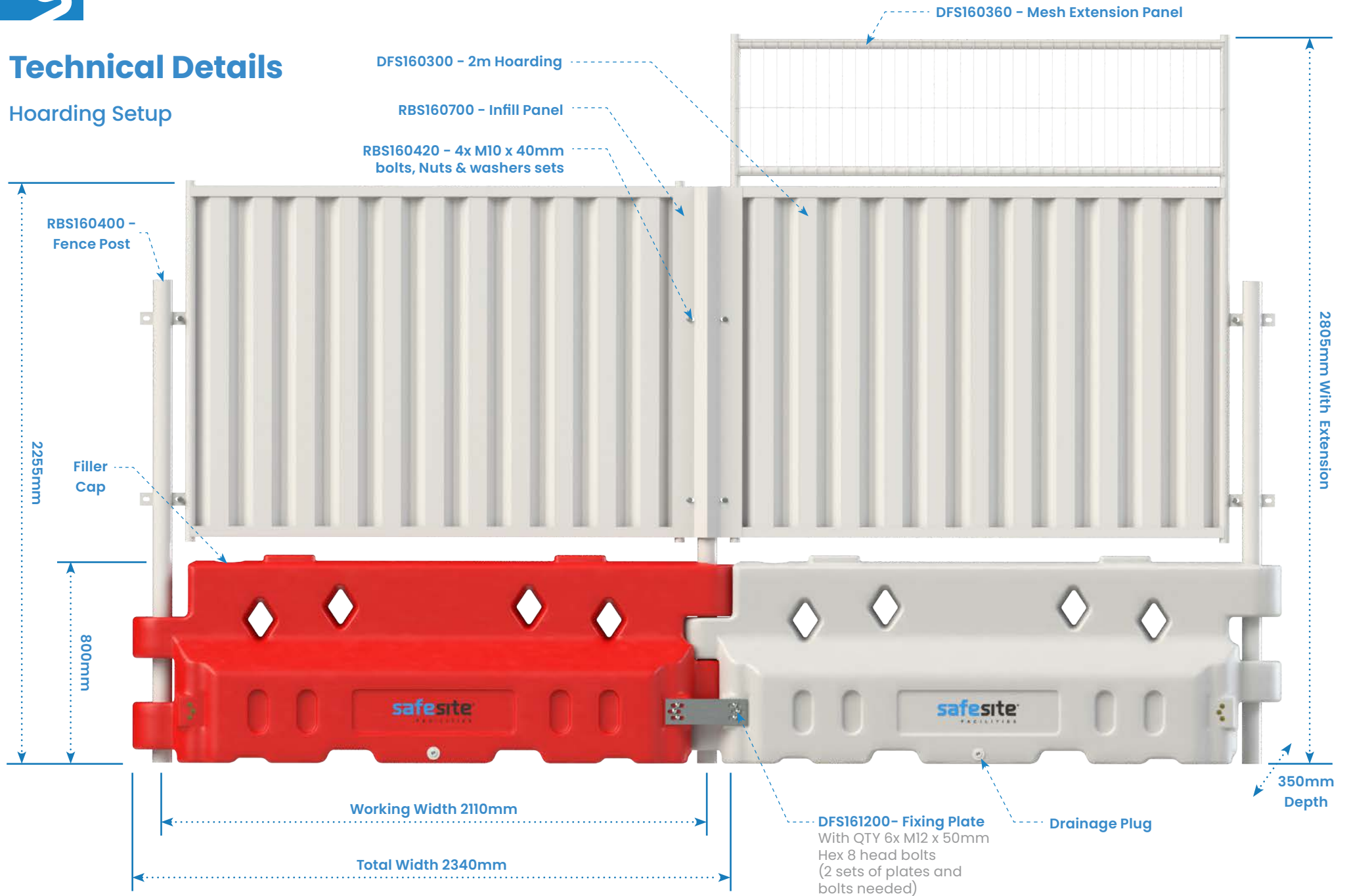
Mesh Fencing Setup





Technical Details

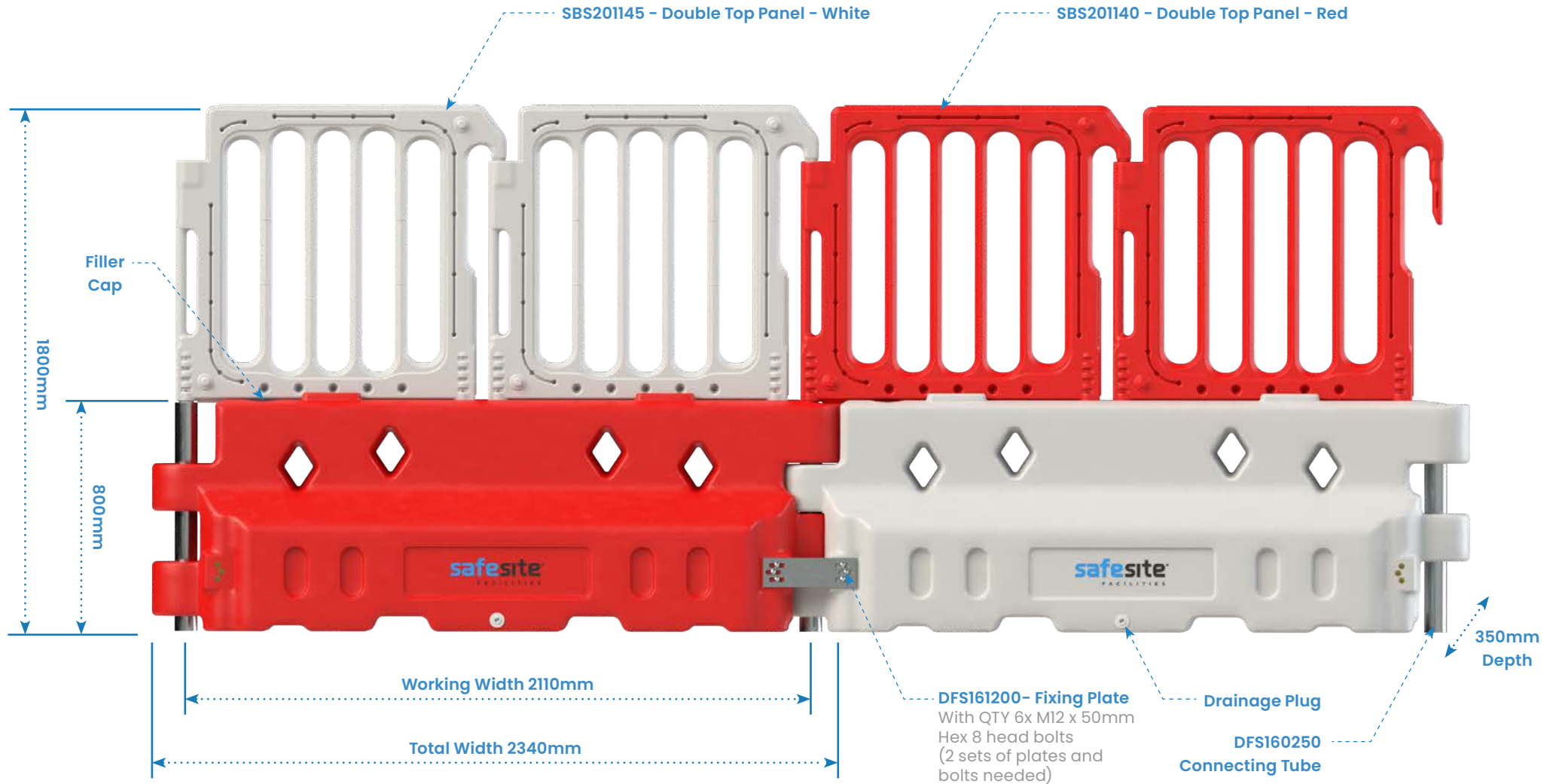
Hoarding Setup





Technical Details

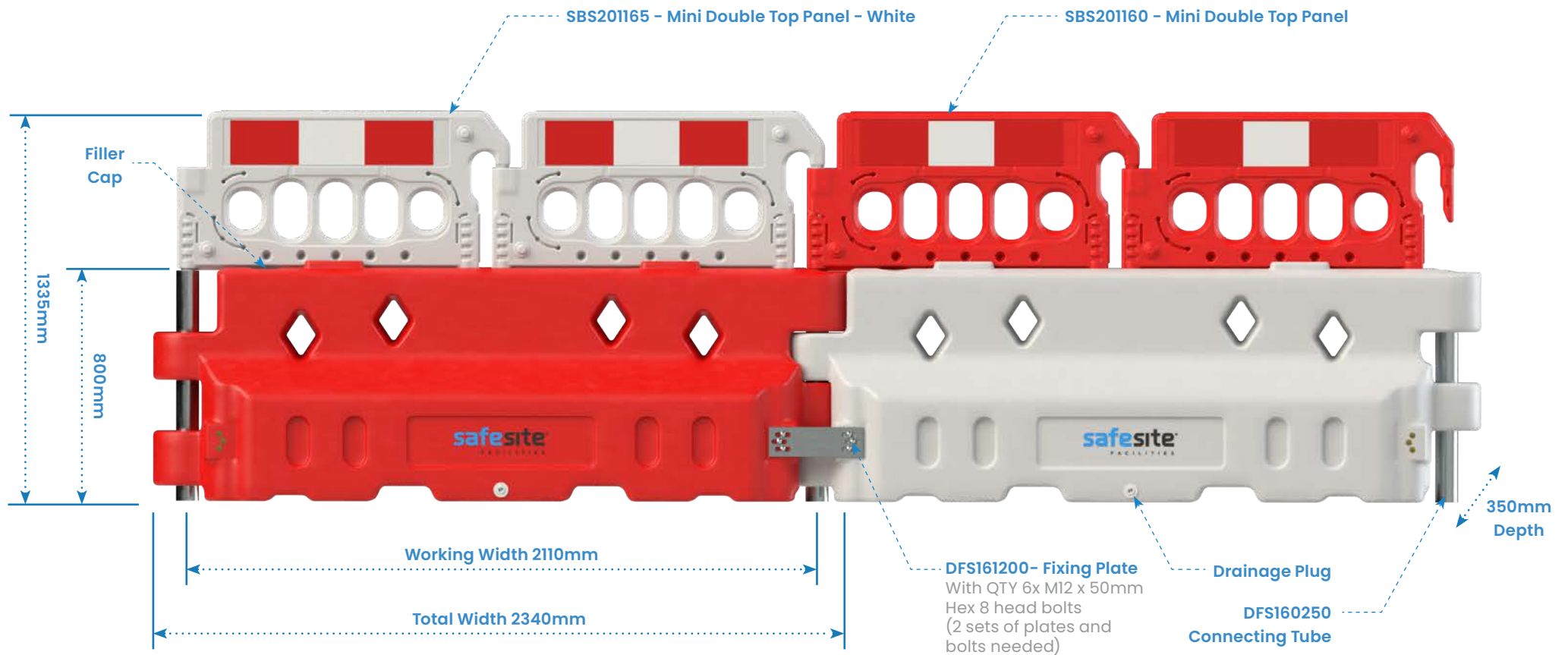
Double Top Setup





Technical Details

Mini Top Setup



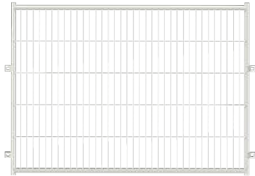





Installation parts & Fencing Accessories

Defender50 Crash Water Filled Barrier – Measurements in mm

1	Drainage plug DFS161900 Quantity: 1	2	Fill cap DFS161910 Quantity: 1	3	M12 x 50mm Hex 8 head bolts Quantity: 12	4	Fixing Plate DFS161200 Quantity: 2 per barrier	5	Connecting Tube DFS160250 Quantity: 1 per barrier
									
Size (mm)		Weight (kg)		Size (mm)		Weight (kg)		Size (mm)	
-		-		H20 x D21		H100 x W314 x D8		H770 x W76 x D76v	
-		-		-		1.7		4.2	

Additional parts for Mesh Fencing

6	Fence panel DFS160320 Quantity: 1 per barrier	7	Extension Panel DFS160360 Quantity: 1 per barrier	8	Fence Post RBS160400 Quantity: 1 per barrier (replaces connecting tube)	9	M10 x 40mm fixing sets RBS160420 Quantity: 4 per barrier
							
Size (mm)		Weight (kg)		Size (mm)		Weight (kg)	
H1400 x W1934 x D38		8		H570 x W1934 x D38		6	
H1870 x W175 x D70		9		H40 x W10		0.45	



Additional parts for Hoarding

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Hoarding panel DFS160300

Quantity: 1 per barrier

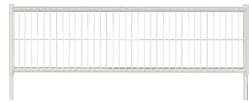


Size (mm)	Weight (kg)
H1400 x W1934 x D38	21

11

Extension Panel DFS160360

Quantity: 1 per barrier



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

12

Hoarding Infill Panel RBS160700

Quantity: 1 per barrier
if required



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

13

Fence Post RBS160400

Quantity: 1 per barrier
(replaces connecting tube)



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

14

M10 x 40mm fixing sets RBS160420

Quantity: 4 per barrier



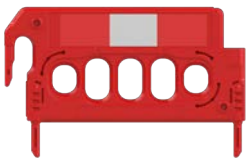
Size (mm)	Weight (kg)
H40 x W10	0.45

DoubleTop options

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Mini DoubleTop Panel SBS201160

Quantity: 2 per barrier



Size (mm)	Weight (kg)
H535 x W1115 x D60	3

16

DoubleTop Panel SBS201140

Quantity: 2 per barrier



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