



STRONGWALL & STRONGFENCE



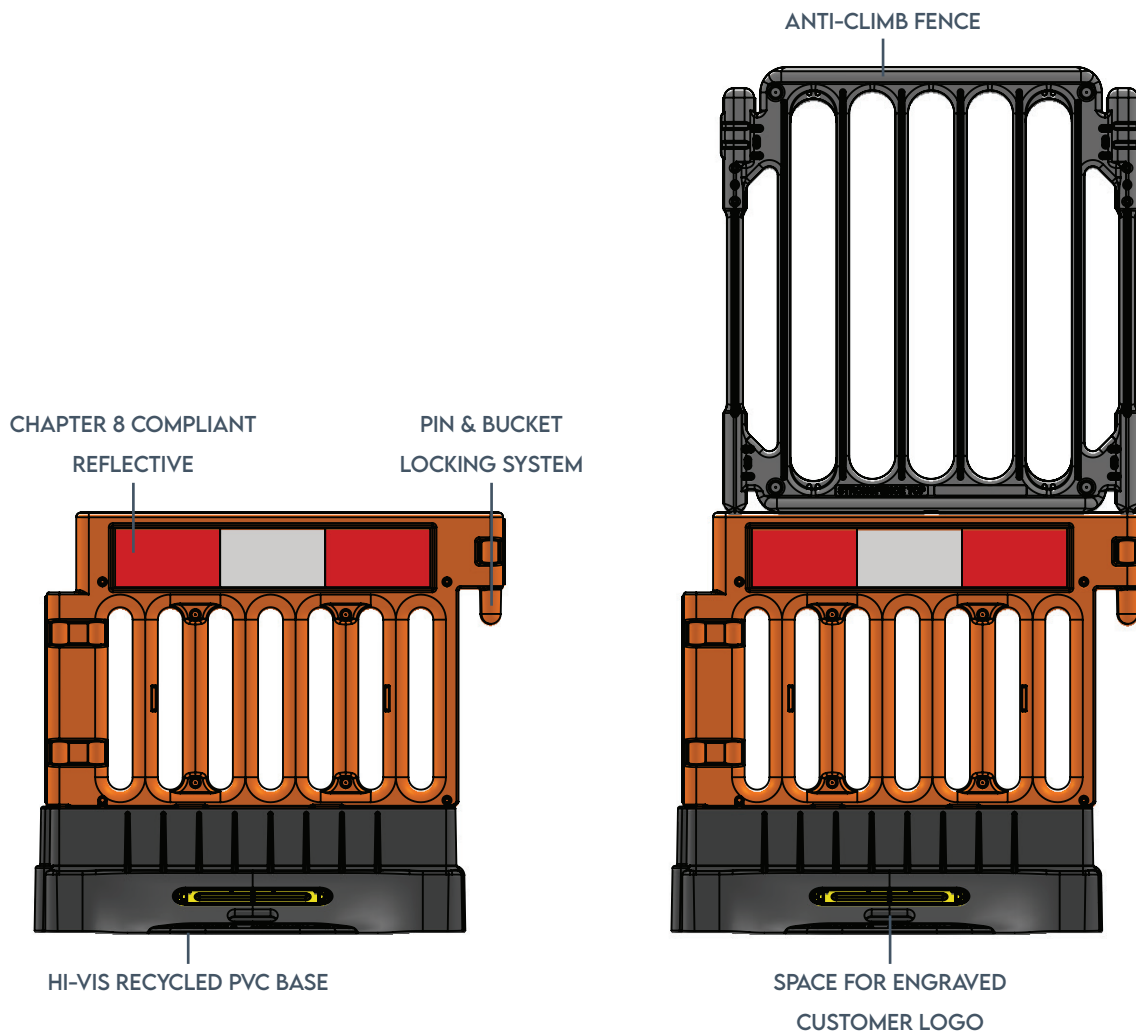
CONTENTS

PAGE

3	Features and benefits
4	Branding and customisation
5	What problems does it solve
6	Dimensions and weights
7	Installation
8	Wind resistance
9	Wind data scale specifications
10	Rail trackside usage
11	Code compliance
12	Inspection and maintenance
13	Repairing the reflective
14	Spares
15	Recyclability
16	Associated products
	Contact information



FEATURES AND BENEFITS



ADVANCED BARRIER

Fully compliant with Chapter 8 Streetworks.

Heavy-duty, robust plastic barrier.

Anti-tamper, interlocking barrier to prevent theft.

Top sections can be water or sand filled.

Highly wind-resistant.

EASY TO USE & TRANSPORT

Modular design for ease of transport and handling.

Non-conductive & non-corrosive anti-climb fence top.

EXTRAS

Can be customised with customer logos, MOQs apply.

Colour customisable, MOQs apply.

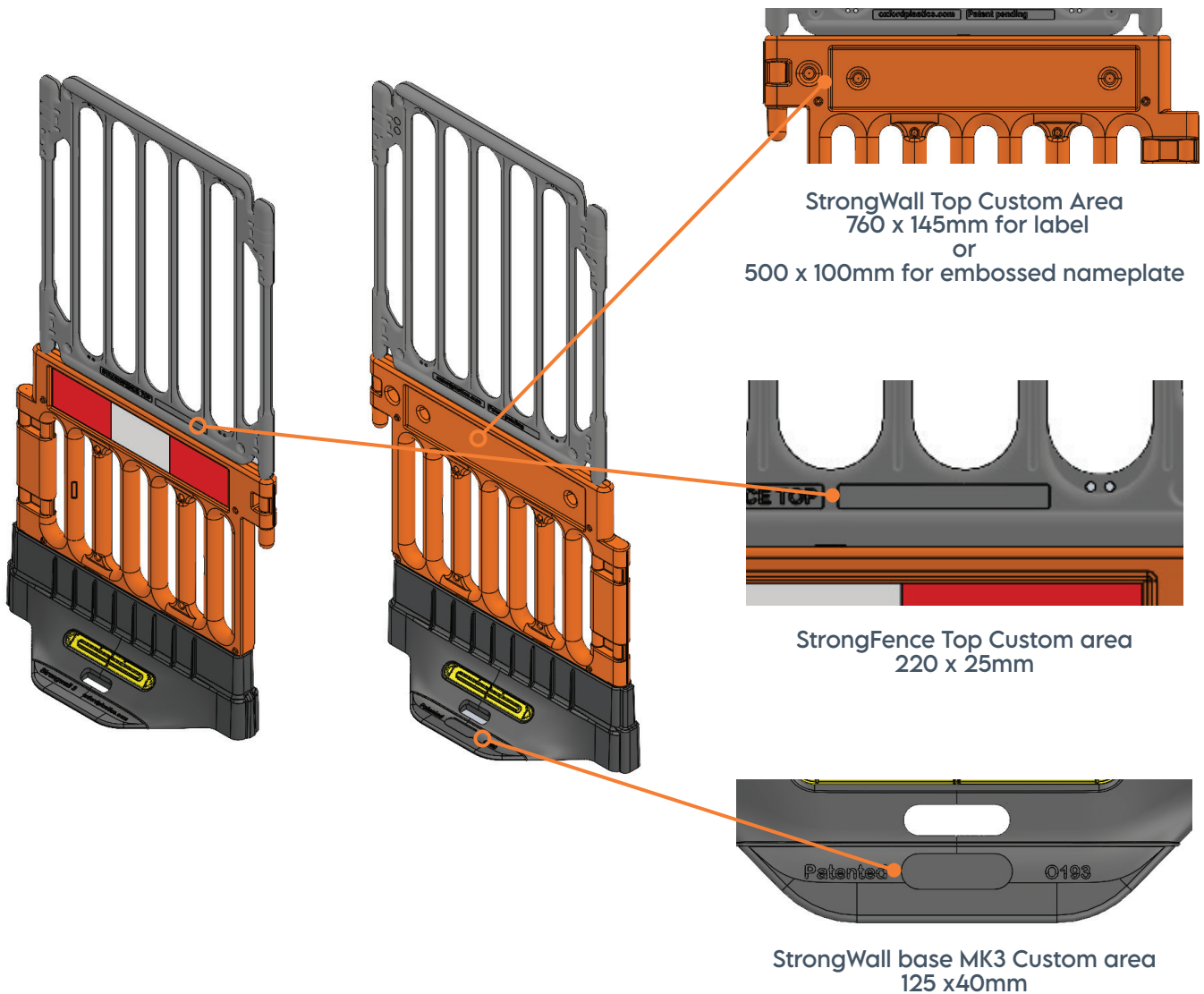
2m / 6.8ft tall fence with plastic top for deep excavation and hazardous sites.

Recycled plastic 18kg / 40lbs base, full barrier system is recyclable.



BRANDING AND CUSTOMISATION

	Standard Colour	Non-standard Colours Available	Embossing
StrongWall Base MK3	Black	N/A	MOQs apply
StrongWall Single-Sided Base	Black	N/A	N/A
StrongWall Top	Orange	MOQ 500 off	MOQ 500 off
StrongFence Top	Grey	MOQ 500 off	MOQ 500 off



WHAT PROBLEMS DOES IT SOLVE



PLASTIC CONSTRUCTION FENCE

Provides safe access for pedestrian through highways and construction works.

Maximise safety for members of the public and site workers.

Robust 18kg / 40lbs base creates a strong perimeter.

CREATE ACCESS

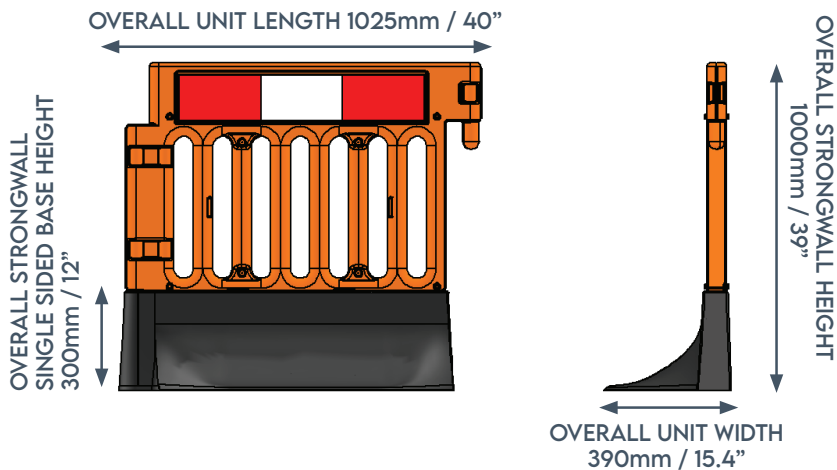
Demarcate walkways and thoroughfares to avoid hazards.

Plastic top creates 2m / 6.8ft anti-climb fence for deep excavations and hazardous sites.

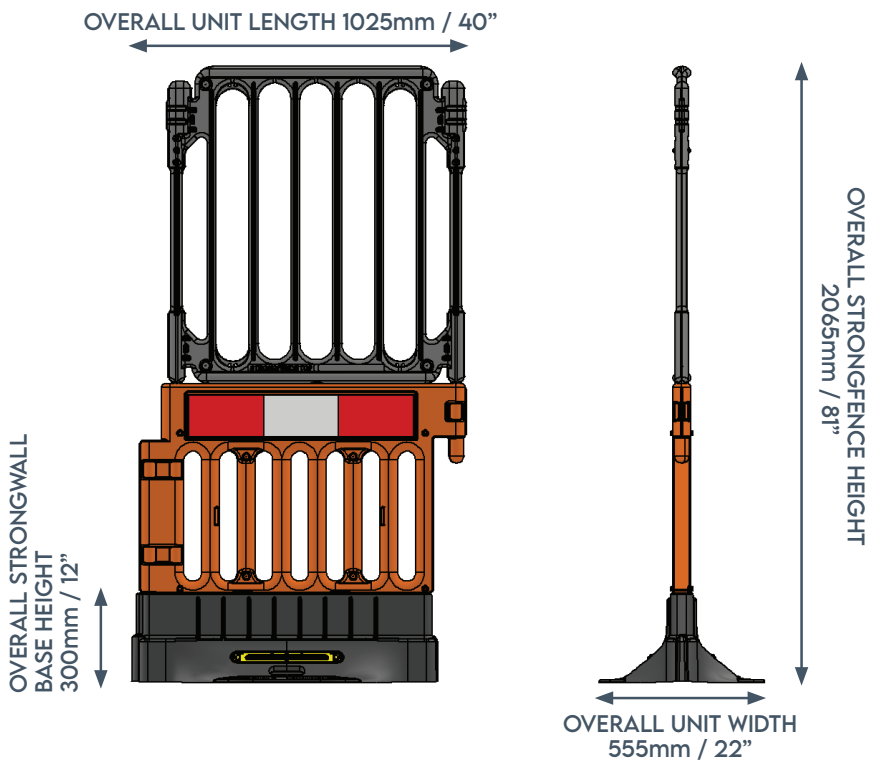


DIMENSIONS AND WEIGHTS

Assembled Single Sided StrongWall



Assembled StrongFence



Part Name	Product Code	Height	Width	Length	Weight
StrongWall Base MK3	O193	300mm / 12"	555mm / 22"	1025mm / 40"	18.5kg / 41lbs
StrongWall Singe-Sided Base	O196	300mm / 12"	390mm / 15.4"	1025mm / 40"	18kg / 40lbs
StrongWall Top	O629	850mm / 33"	60mm / 2"	1087mm / 43"	4kg / 9lbs
StrongFence Top	O687	1230mm / 48"	45mm / 1.8"	985mm / 39"	3kg / 7lbs
Plastic Coupler	O667	90mm / 3"	52mm / 2"	145mm / 6"	0.1kg / 0.2lbs
Metal Coupler	O645		40mm / 2"		0.2kg / 0.4lbs





INSTALLATION AND SAFE HANDLING

Follow the process below for safe and effective installations.

Risk assessments should be carried out to ensure the usage is suitable for the scenario.



Ensure that the side marked "FRONT" is traffic-facing.



Place the bases next to one another.



Ensure the side marked "FRONT" is traffic-facing, then insert the first StrongWall top into the base.



Insert the next StrongWall top so that the connecting pin slots into the locator hole of the previous base.



Insert the StrongFence top into the StrongWall. Ensure the StrongFence top is pushed down as far as possible.



Once installed connect the StrongFence tops together using standard plastic couplers.



Use cable ties to easily attach signage through the built-in holes



Deploy StrongFence at a right angle for stability.



For StrongWall & StrongFence configurations to achieve certain wind categories, please refer to the 'Wind Resistance' section.



WIND RESISTANCE

The StrongWall and StrongFence can be configured to meet wind classification requirements to BS8442 as shown below.

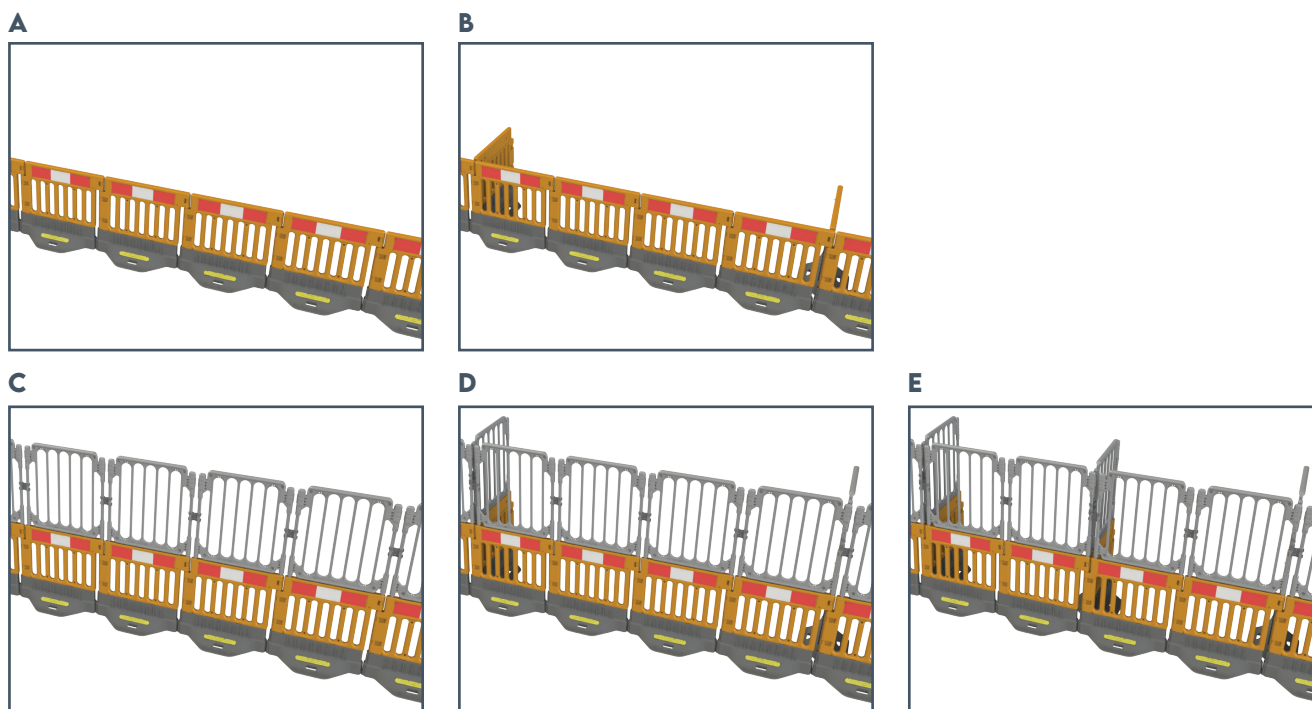
WIND CLASSIFICATIONS FOR BS8442

Category A: 26.3 m/s, 59mph

Category B: 17.6 m/s, 39mph

Category C: 8.7 m/s, 19mph

STRONGWALL & STRONGFENCE CONFIGURATIONS TO PASS WIND CLASSIFICATIONS FOR BS8442:



Configuration	Description	Cat C	Cat B	Cat A
A	StrongWall in a line	✓	✓	
B	StrongWall in a line with one placed at a right angle every 4 barriers	✓	✓	✓
C	StrongFence in a line	✓		
D	StrongFence in a line with one placed at a right angle every 4 barriers	✓	✓	
E	StrongFence in a line with one placed at a right angle every 2 barriers	✓	✓	✓



WIND DATA SCALE SPECIFICATIONS

WIND CLASSIFICATIONS FOR BS8442

Wind Class	Meters per second (m/s)	Mile per hour (mph)
Class A	26.3	59
Class B	17.6	39.6
Class C	8.7	19.6

CLASSIFICATION AND LABELLING OF UNITS

The manufacturer shall indicate the mass ballast to be added to each barrier assembly to resist a specified class of wind speed, depending upon the barrier configuration and the level of wind resistance chosen.

BEAUFORT SCALE, WIND FORCE OR GALE FORCE

Force 2	8-12mph	Gentle breeze, leaves and small twigs in constant motion, wind extends light flag
Force 3	13-18mph	Moderate breeze, raises duct loose paper, small branches are moved
Force 5	19-24mph	Fresh breeze, small trees in leaf begin to sway, crested wavelets form on inland water
Force 6	25-31mph	Strong breeze, large branches in motion, whistling heard in telegraph wires, umbrellas difficult
Force 7	32-38mph	Near gale, walking noticeably hampered
Force 8	39-46mph	Gale, branches break, walking very difficult
Force 9	47-54mph	Severe gale, slates blown off roofs
Force 10	55-63mph	Storm, trees up rooted





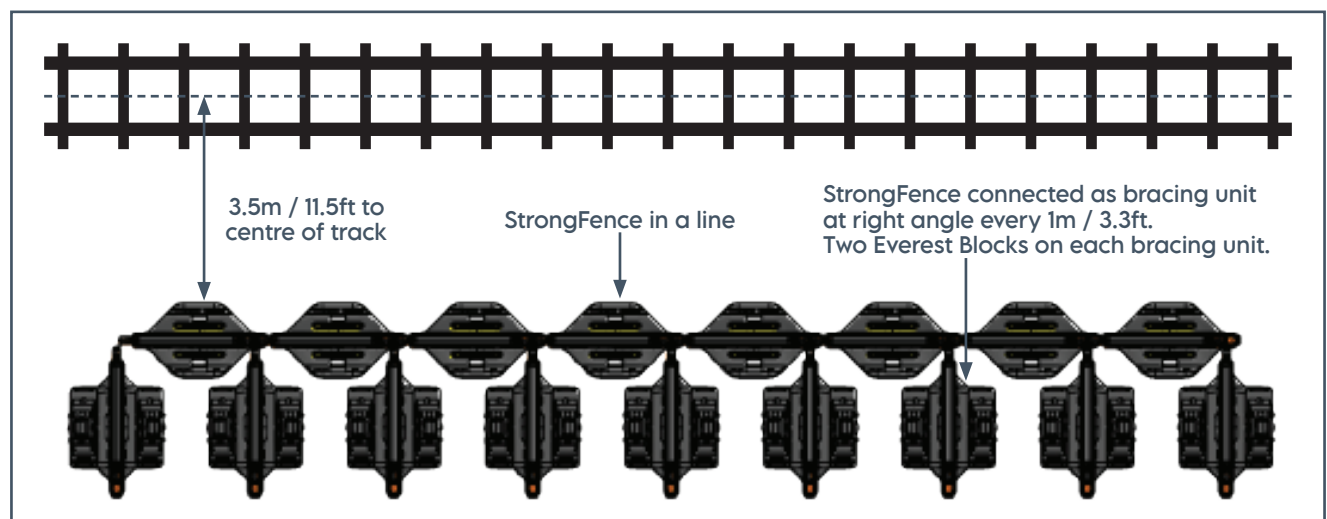
RAIL TRACKSIDE USAGE

For rail trackside usage, the StrongFence can be set up in the following configuration, suitable for max speed of train: 75mph / 120 kph.

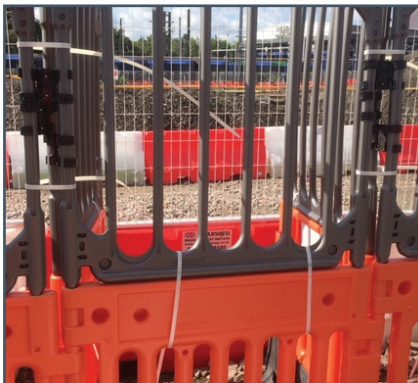
Risk assessments should be carried out to ensure the usage is suitable for the scenario.

Inspect assembly thoroughly after install to confirm all connections and cable ties are properly attached.

Periodically inspect connections and cable ties.



ALL ELEMENTS MUST BE SECURELY ATTACHED TOGETHER AS SHOWN IN IMAGES BELOW:



Cable tie StrongWall and StrongFence tops together as shown.
Use three Couplers as shown.



Cable tie Everest Blocks to bracing units as shown.

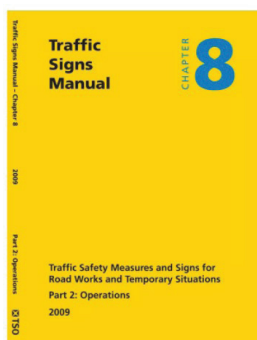
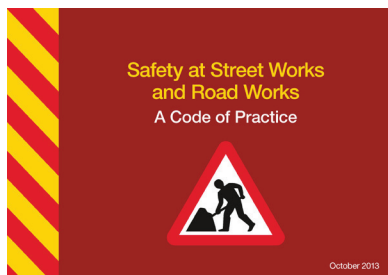


Cable tie size must be 12mm / 0.5" wide minimum.

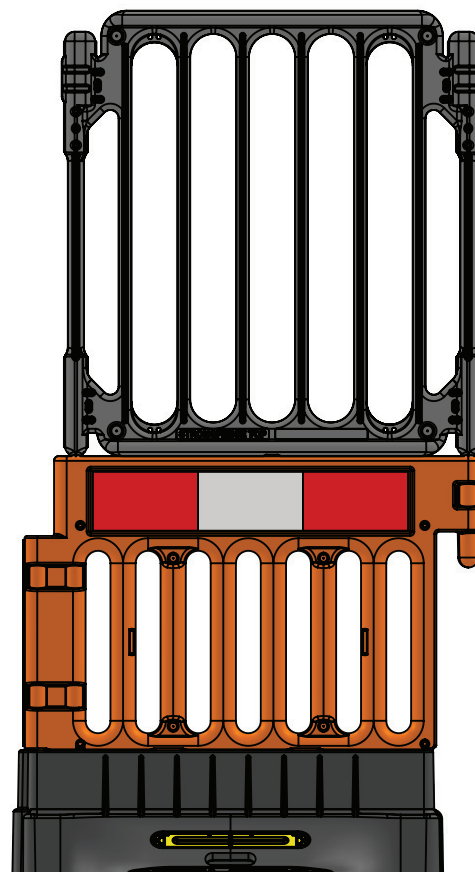




CODE COMPLIANCE



BRITISH
STANDARDS



WHAT IS REGULATORY COMPLIANCE?

The Street Works manual, or Red Book, tells contractors how to set up their street works sites in a compliant manner and tells manufacturers how to make compliant products. Oxford Plastics design plastic safety barriers & anti-climb enhanced barriers that are 100% compliant with the Safety at Street Works and Road Works (Red Book), Traffic Signs Manual (Chapter 8), BS 8442:2015 Miscellaneous road traffic signs and devices - requirements and test methods, BS EN 13422:2019 Vertical road signs — Portable deformable warning devices and delineators — Portable road traffic signs — Cones and cylinders, BS 7818:1995 Specification for pedestrian restraint systems in metal.

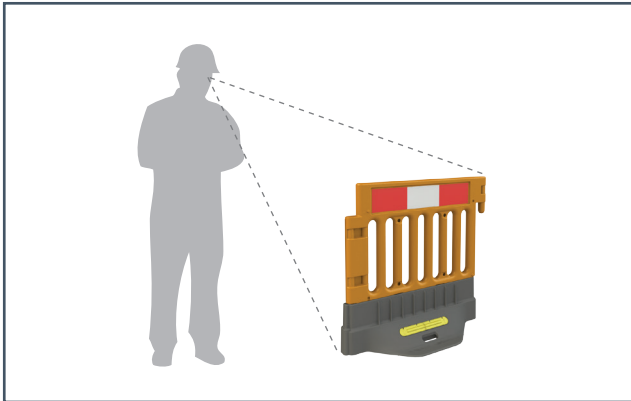
The StrongWall and StrongFence barrier systems are Chapter 8 compliant for streetworks use.



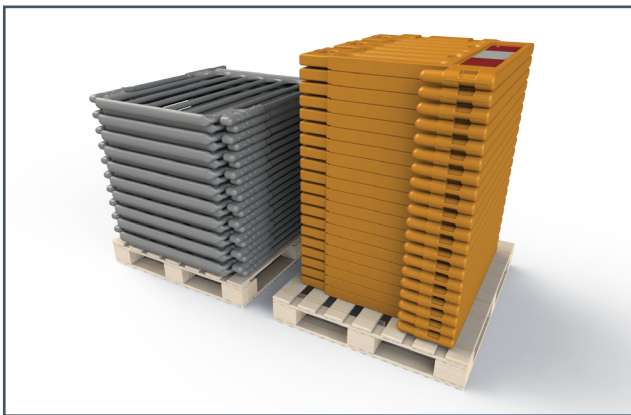


INSPECTION AND MAINTENANCE

Care for the product by following the below guidance:



Inspect each product for signs of damage between every installation, including bases, StrongWall tops and StrongFence tops.



When storing and transporting, ensure the StrongWall & StrongFence Barrier tops are stacked and lay flat on top of each other. Bases are able to be uniformly stacked too.

SIGNS OF DAMAGE

Cracks or breaks in the StrongWall Base, StrongWall Top or StrongFence top indicate it has been damaged through improper use.

If the product shows signs of damage, it should be disposed of.

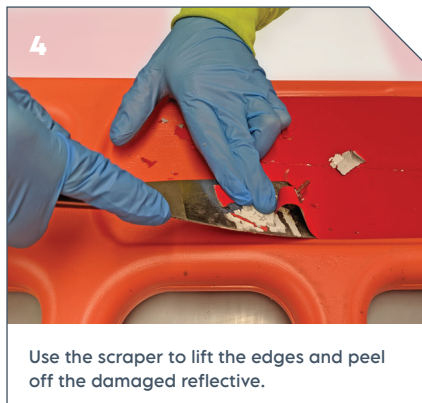
StrongWall & StrongFence are modular, individual components are able to be purchased as spare parts.

The barriers reflective is also able to be replaced in house.



REPAIRING THE REFLECTIVE

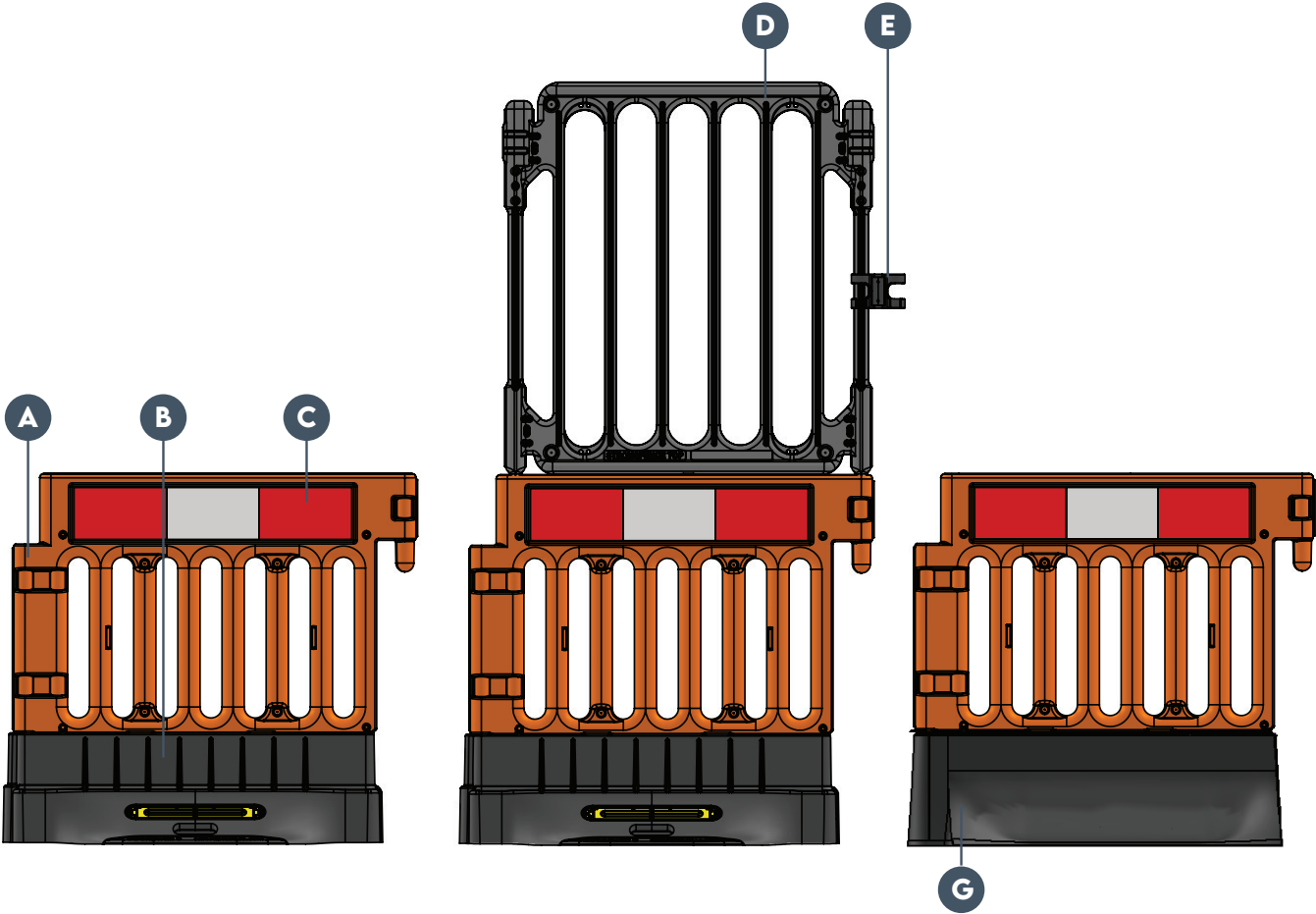
A guide to reapplying reflective strips on Chapter 8 barriers.





SPARES

Parts can be disassembled, enabling elements to be replaced in the unlikely event of damage.



	Part Name	Material	Product Code
A	StrongWall Top	Orange HDPE	O628
B	StrongWall Base MK3	Black Recycled PVC	O193
C	StrongWall Reflective	Red and white	O9897
D	StrongFence Top	Silver HDPE	O687
E	Plastic Coupler	Black HDPE	O645
F	Metal Coupler	Galvanised Steel	O667
G	StrongWall Single-Sided Base	Black Recycled PVC	O196



RECYCLABILITY



The StrongWall and StrongFence top are made from HDPE and the StrongWall Base is made from recycled plastic. All components are recyclable.

Contact Oxford Plastics for information about returning end of life products.



ASSOCIATED PRODUCTS

When setting up a streetworks site, other Oxford Plastics solutions can be used to ensure compliance is achieved.. Advanced barrier systems, trench covers, road plates, wheelchair ramps and cones.



ADVANCED BARRIER SYSTEMS



WHEELCHAIR RAMPS



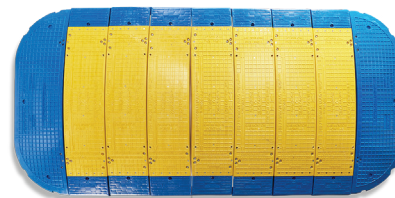
ROAD CONES



STREET WORKS SIGN



TRENCH COVERS



ROAD PLATES



CONTACT INFORMATION

UK & R.O.W

Oxford Plastic Systems Ltd
Unit T2, Enstone Business Park
Enstone,
Chipping Norton
Oxfordshire
OX7 4NP
United Kingdom

sales@oxfordplastics.com
Tel: +44(0)1608 678888

USA

Oxford Plastic Systems LLC
1011 Centre Rd,
Suite 312,
Wilmington
DE
19805
USA

info@oxfordplasticsusa.com
1-800-567-9182





WIND DATA SCALE SPECIFICATIONS

WIND CLASSIFICATIONS FOR BS8442

Wind Class	Meters per second (m/s)	Mile per hour (mph)
Class A	26.3	59
Class B	17.6	39.6
Class C	8.7	19.6

CLASSIFICATION AND LABELLING OF UNITS

The manufacturer shall indicate the mass ballast to be added to each barrier assembly to resist a specified class of wind speed, depending upon the barrier configuration and the level of wind resistance chosen.

BEAUFORT SCALE, WIND FORCE OR GALE FORCE

Force 2	8-12mph	Gentle breeze, leaves and small twigs in constant motion, wind extends light flag
Force 3	13-18mph	Moderate breeze, raises duct loose paper, small branches are moved
Force 5	19-24mph	Fresh breeze, small trees in leaf begin to sway, crested wavelets form on inland water
Force 6	25-31mph	Strong breeze, large branches in motion, whistling heard in telegraph wires, umbrellas difficult
Force 7	32-38mph	Near gale, walking noticeably hampered
Force 8	39-46mph	Gale, branches break, walking very difficult
Force 9	47-54mph	Severe gale, slates blown off roofs
Force 10	55-63mph	Storm, trees up rooted

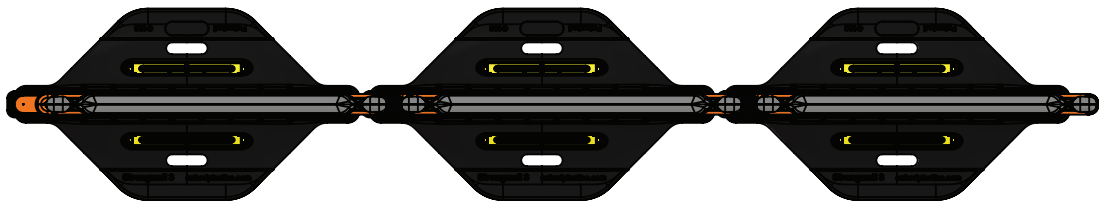




WIND TEST DATA

TEST 1: 3 units in line with double clips on upper section

	Windspeed m/s			mph		Gale Force
	Pass	E 8.6 m/s	Fail	Pass	Fail	0 - 8
No mesh on upper panels	8	Fail	8.1	17.9	18.12	4
2 x mesh panels on outer sections	5.8	Fail	5.9	12.97	13.19	4



TEST 2: 3 units in line with 4 90° buttress units

	Windspeed m/s			mph		Gale Force
	Pass	E 8.6 m/s	Fail	Pass	Fail	0 - 8
No mesh on upper panels	17.2	Pass	17.3	38.48	38.7	7
2 x mesh panels on outer sections	14	Pass	14.1	31.32	31.54	6

