# STRONGWALL & STRONGFENCE

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#### echnical guidance

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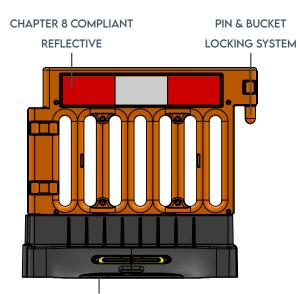
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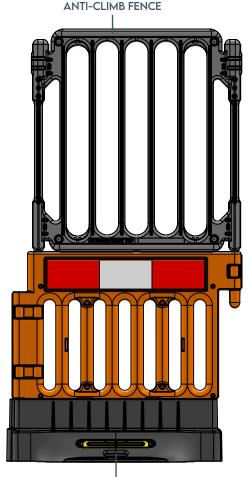
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### FEATURES AND BENEFITS

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HI-VIS RECYCLED PVC BASE



SPACE FOR ENGRAVED CUSTOMER LOGO

#### **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.

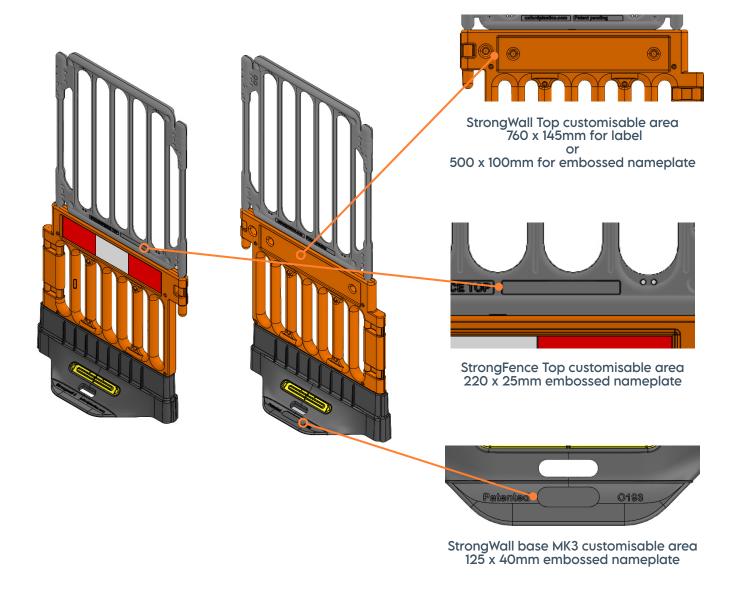
2m / 6.8ft tall fence with plastic top for deep excavation and hazardous sites.

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

### BRANDING AND CUSTOMISATION

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	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



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### 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 / 40lb base creates a strong perimeter.

#### **CREATE ACCESS**

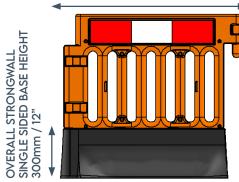
Demarcate walkways and thoroughfares to avoid hazards.

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

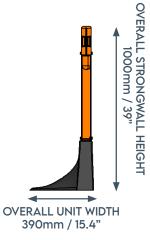
## DIMENSIONS AND WEIGHTS

Assembled Single Sided StrongWall

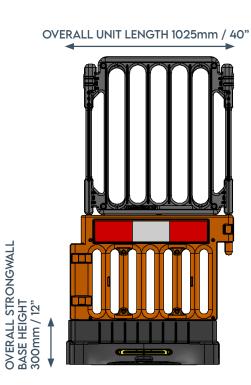
OVERALL UNIT LENGTH 1025mm / 40"



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Assembled StrongFence





Part	Name	Product Code	Height	Width	Length	Weight
Stro	ngWall Base MK3	O193	300mm / 12"	555mm / 22"	1025mm / 40"	18.5kg / 41lb
Stro	ngWall Singe-Sided Base	O196	300mm / 12"	390mm / 15.4"	1025mm / 40"	18kg / 40lb
Stro	ngWall Top	O629	850mm / 33"	60mm / 2"	1087mm / 43"	4kg / 9lb
Stro	ngFence Top	O687	1230mm / 48"	45mm / 1.8"	985mm / 39"	3kg / 7lb
Plas	tic Coupler	O667	90mm / 3"	52mm / 2"	145mm / 6"	0.1kg / 0.2lb
Meto	al Coupler	O645		40mm / 2"		0.2kg / 0.4lb
J	Oxford Plastics			OXFORDPLASTICS.COM   VERSION 1 NO4 6		

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## 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 that 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. StrongFence should be cable tied together when set up at a perpendicular angle.



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

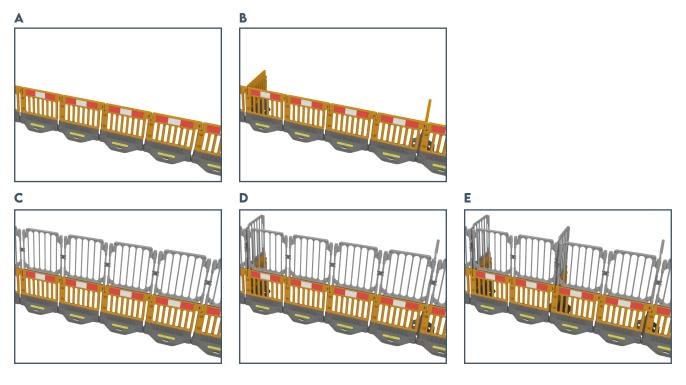
### WIND RESISTANCE

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

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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
Α	StrongWall in a line	$\checkmark$	$\checkmark$	
В	StrongWall in a line with one placed at a right angle	$\checkmark$	$\checkmark$	$\checkmark$
	every 4 barriers			
С	StrongFence in a line	$\checkmark$		
D	StrongFence in a line with one placed at a right	$\checkmark$	$\checkmark$	
	angle every 4 barriers			
E	StrongFence in a line with one placed at a right	$\checkmark$	$\checkmark$	$\checkmark$
	angle every 2 barriers			

### WIND DATA SCALE SPECIFICATIONS

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#### WIND CLASSIFICATIONS FOR BS8442

Wind Class	Meters per second (m/s)	Miles 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, creste		Fresh breeze, small trees in leaf begin to sway, crested wavelets form on	
		inland water	
Force 625-31mphStrong breeze, large		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	

#### **Oxford Plastics**

### RAIL TRACKSIDE USAGE

The StrongFence can be used at Rail Trackside applications. It can be configured to provide resistance to a range of windspeeds and pressures:

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Extra barriers can be attached as braces perpendicular to the fence line.
A double row can be installed with bracing barriers between the two rows.

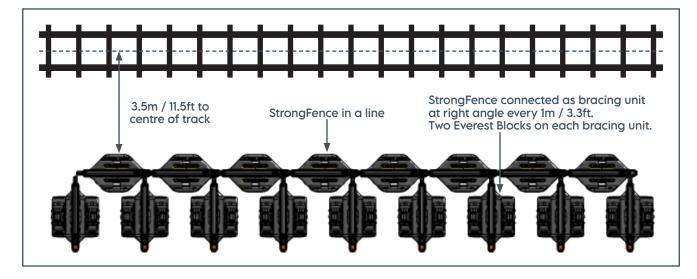
• The orange Strongwall moulding is hollow and can be filled with up to 14L of ballast material, for example water or sand.

• Kentledge ballast can be attached to each barrier in the form of Oxford Heavy Bases.

The images on this page show one example configuration, different configurations will be required depending on the site conditions. The contractor should carry out risk assessments and structural calculations to confirm the most suitable configuration for each site.

After installation, the contractor should inspect to confirm the safe condition of the installation, and periodically thereafter.





#### 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.



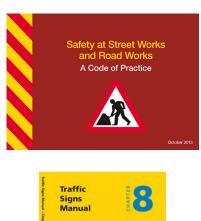
Cable tie Everest Blocks to bracing units as shown.



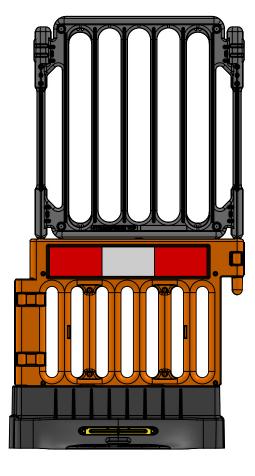
Cable tie size must be 12mm / 0.5" wide minimum.

### **CODE COMPLIANCE**

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#### WHAT IS REGULATORY COMPLIANCE?

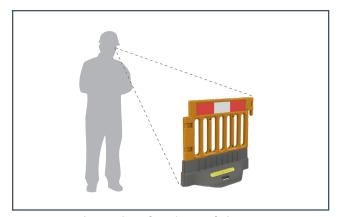
The Street Works manual, or Red Book, tells contractors how to set up their street works sites in a compliant manner and tells manufacturers how to make compliant products. Oxford Plastics design plastic safety barriers & anti-climb enhanced barriers that are 100% compliant with the Safety at Street 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.

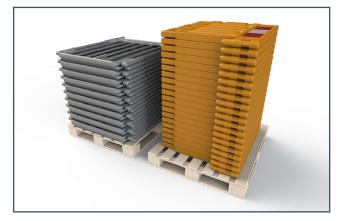
### INSPECTION AND MAINTENANCE

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### 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.

STRONGWALL & STRONGFENCE | TECHNICAL GUIDANCE

### REPAIRING THE REFLECTIVE

A guide to reapplying reflective strips on Chapter 8 barriers.

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scraper, sponges, a self-made applicator, a plunger can filled with PA Isopropyl Alcohol, a plunger can filled with standard CP906-P1 Primer and PPE.



The applicator should be a handheld size, approx. 12x8cm. Fabricate from a piece of hard plastic or card, wrap this in felt, wrap this in a tough fabric and secure together with duct tape.



Place the barrier on a flat stable surface.



Use the scraper to lift the edges and peel off the damaged reflective.



Clean the recessed reflective surface area with a new cleaning sponge soaked with the Alcohol and allow to air-dry for 15 seconds.



Use a new sponge coated in Standard Primer and, starting at the bottom, ensure that the primer has covered and wetted the whole area. Leave to air dry for 5 minutes.



Remove the backing paper from the reflective strip and place it on the barrier, ensuring that it is in the centre of the recess.



Use the applicator and, applying a firm pressure, work one end to the other in a zig-zag motion pushing down the sticker and removing the air from underneath.



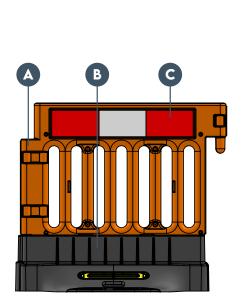
There should be no cuts or tears in the reflective. Air bubbles should not exceed 5x15mm or 10x10mm. Air bubbles should be no closer than 20mm to the edge.

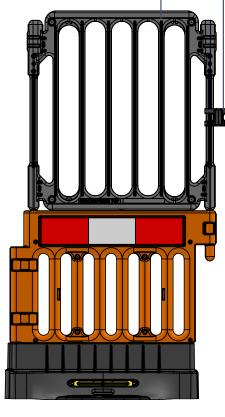
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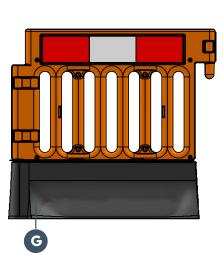
### **SPARES**

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





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	Part Name	Material	Product Code
Α	StrongWall Top	Orange HDPE	O628
В	StrongWall Base MK3	Black Recycled PVC	O193
С	StrongWall Reflective	Red and white	09897
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

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The StrongWall and StrongFence Tops 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.



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## 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** 



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