Oxford Plastics Product Guidelines

## **AVALON BARRIER**



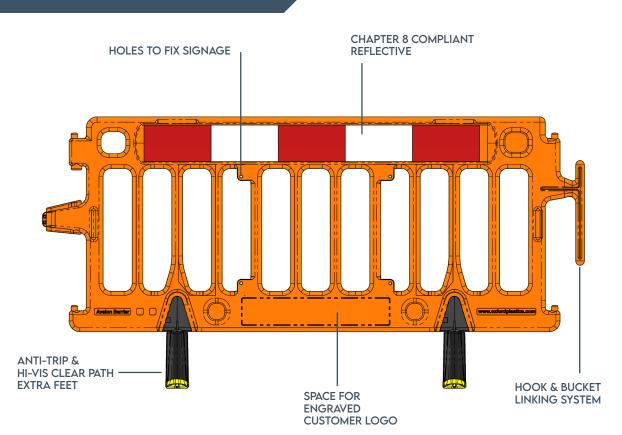
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## FEATURES AND BENEFITS



#### **SAFETY BARRIER**

Fully compliant with Chapter 8 Street Works.

Oxford Plastics' most versatile safety barrier.

2m / 80", 1m / 42" and 0.5m / 26" sizes available to meet specific requirements.

Tamper-proof locking system.

Create semi-permanent perimeter using our ballasting options.

#### **EASY TO USE & TRANSPORT**

Barriers nest together for efficient and secure stacking.

2m / 80" sections weigh only 11kg.

Available with ballasting options up to category A wind resistance.

#### **EXTRAS**

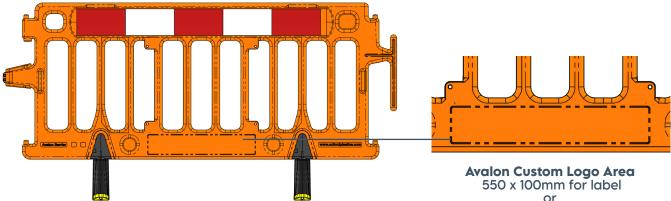
Can be customised with customer logos.

Colour customisable, MOQs apply.

Maintain quality and performance with spare parts if necessary.

# BRANDING AND CUSTOMISATION

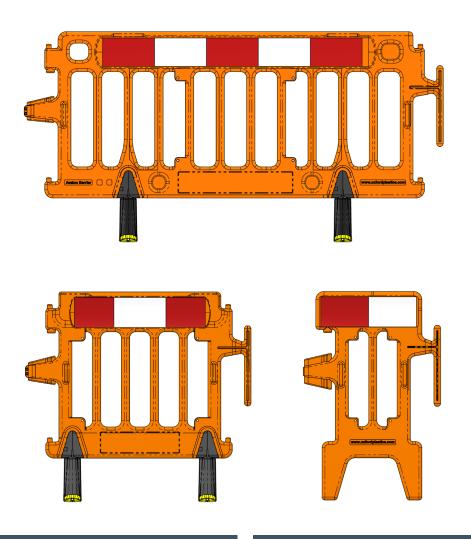
	Standard Colour	Non-standard Colours Available	Embossing
Avalon Barrier	Orange	Blue, Yellow or White MOQ 500 o	
Avalon Barrier	Orange	All other non-core custom colours	MOQ 500 off
ClearPath Extra Feet	Black and Yellow	N/A	N/A
Standard Feet	Black	N/A	N/A



or 480 x 70mm for embossed nameplate



## WHAT PROBLEMS DOES IT SOLVE



#### PLASTIC ROAD SAFETY BARRIER

Provides safe access for pedestrians through highways and construction works.

Maximise safety for members of the public and site workers.

Feet available in 2 options: ClearPath Extra which is 100% anti-trip, or Standard.

#### **CREATE ACCESS**

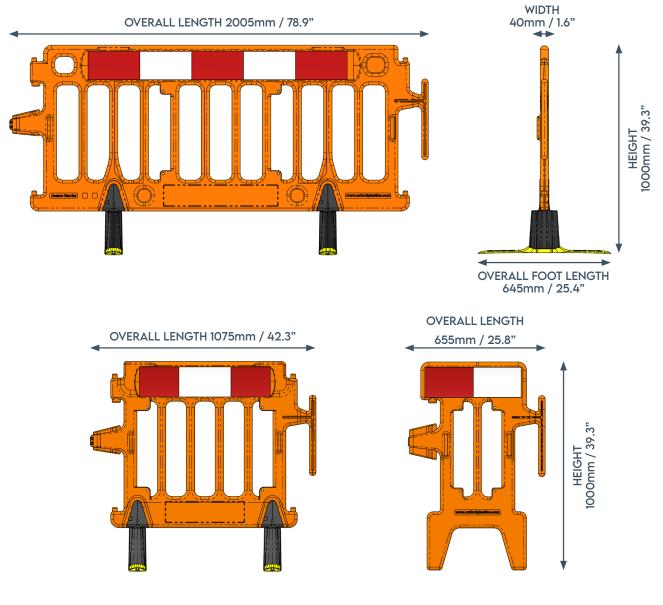
Clearly defined access in high traffic areas.

Link barriers together using the hook and bucket linking system to create any configuration for street works or construction sites.

## DIMENSIONS AND WEIGHTS

#### AVALON BARRIERS - 2m, 1m and 0.5m, SHOWN WITH CLEARPATH EXTRA FEET

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Part Name	Product Code
Avalon Barrier 2m	O635
Avalon Barrier 1m	O634
Avalon Barrier 0.5m	O646

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## FULL PRODUCT RANGE

Description	Dimensions	Images
O646 Avalon Barrier 0.5m Orange with reflective	655mm / 25.8"(L) x 40mm / 1.6"(W) x 1000mm / 39.3"(H)	
O634 Avalon Barrier 1.0m Orange with reflective, with Standard Black Feet	1075mm / 42.3"(L) x 40mm / 1.6"(W) x 1000mm / 39.3"(H)	
O634 Avalon Barrier 1.0m Orange with reflective, with ClearPath Extra Feet	1075mm / 42.3"(L) x 40mm / 1.6"(W) x 1000mm / 39.3"(H)	
O635 Avalon Barrier 2.0m Orange with reflective, with Standard Black Feet	2005mm / 78.9"(L) x 40mm / 1.6"(W) x 1000mm / 39.3"(H)	
O635 Avalon Barrier 2.0m Orange with reflective, with ClearPath Extra Feet	2005mm / 78.9"(L) x 40mm / 1.6"(W) x 1000mm / 39.3"(H)	

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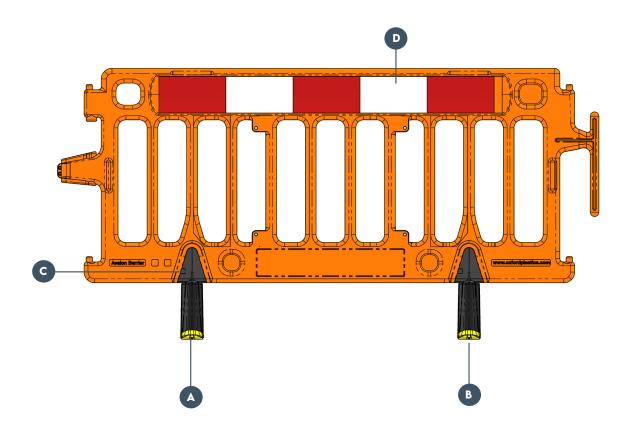
## FULL PRODUCT RANGE

Description	Dimensions	Images
O197 Avalon Double Sided Ballast Base	1000mm / 39.3"(L) x 520mm / 20.5"(W) x 300mm / 11.8"(H)	
O274 DropBlock Barrier Ballast Weight	98mm / 3.9"(L) x 250mm / 93.8"(W) x 395mm / 15.6"(H)	
O621 Avalon Standard Feet Replacement (per foot)	640mm / 25.2"(L) x 87mm / 3.4"(W) x 200mm / 7.9"(H)	
O657 Avalon ClearPath Extra Feet Replacements (per foot)	645mm / 25.4"(L) x 40mm / 1.6"(W) x 1000mm / 39.3"(H)	
O622 Avalon Spigot Replacements (per item)	85mm / 3.3"(L) x 85mm / 3.3"(W) x 200mm / 7.9"(H)	
O9899 1.25m Reflective Strip Only	1250mm / 49.2"(L) x 140mm / 5.5"(H)	

## **SPARES**

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

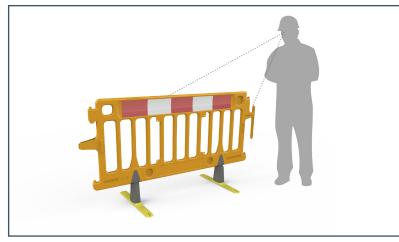
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	Part Name	Material	Product Code
Α	ClearPath Extra Feet	Yellow HDPE, Black recycled PVC, GRP Rebar	O657
В	Standard Foot	Black Recycled PVC	O621
С	Spigot	Black Recycled PVC	O622
D	Reflective	Red & white prismatic acrylic	O9899

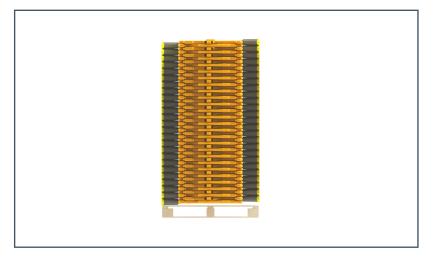
## INSPECTION AND MAINTENANCE

### Care for the product by following the below guidance:



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Inspect each product for signs of damage, between every installation.



When storing and transporting, ensure the Avalon Barriers are stacked and laid flat on top of each other.

Do not drop the product. Do not lift or move with machinery.

#### SIGNS OF DAMAGE

Cracks or breaks in the Avalon Barrier indicate it has been damaged through improper use.

If the product's feet, spigots or reflective show signs of damage they can be repaired using the maintenance guide provided.

Repairing products extends the life of your equipment and reduces its carbon impact on the environment.

## REPAIRING THE REFLECTIVE

A guide to reapplying reflective strips on Chapter 8 barriers.



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.

## **REPAIRING THE**

A guide to removing the spigot and inserting new feet



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a flathead screwdriver, a lump head mallet, 2 new barrier feet & spigots.



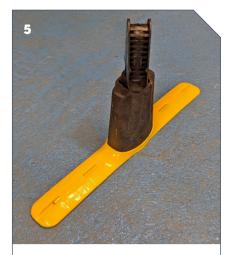
Place the damaged Avalon barrier on a workbench or a stable flat surface.



Insert the flathead screwdriver at the apex of the spigot, at a 45 degree angle.



Hammer the screwdriver down into the spigot until the spigot comes loose and remove it.



Insert the new spigot into the new foot and place on the floor.



Stand the Avalon Barrier in line with the foot and firmly press down.



Ensure the spigot is fully inserted.

## INSTALLATION AND SAFE HANDLING

Follow the process below for safe and effective installation.

Site Specific Risk Assessments should be carried out to ensure the usage is suitable for the scenario.

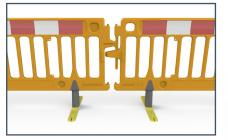
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The Avalon Barrier is suitable for Wind Category C (19mph) but does require additional ballasting for Category B (39 mph) and Category A winds (59 mph).

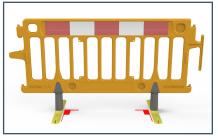
#### **ROW OF AVALON BARRIER**



1. Assess the barriers to ensure there are no broken elements.



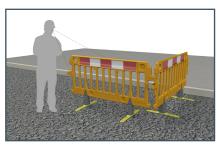
4. Connect Avalon barriers at each end using the hook and bucket locking system.



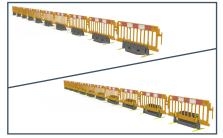
2. Ensure the Avalon Barrier feet are perpendicular to the barrier for stability.



5. For high-wind conditions, install the StrongWall Base Ballast.



3. Begin placing Avalon Barriers with the reflective facing towards traffic.



6. For additional information on ballasting to achieve each wind category, please refer to the Wind Resistance section.

#### **BOX OF AVALON BARRIER**



1. Follow the same procedure as the row of Avalon Barriers up to stage 4.



2. Place the Avalon Barrier in a box formation, connecting them with the hook and bucket system.

Optional Stability Bars can be added to reduce the risk of barriers sliding & folding into each other.



3. For additional information on ballasting to achieve each wind category, please refer to the Wind Resistance section.

## WIND RESISTANCE

The Avalon Barrier system can be configured to meet wind classification requirements to BS8442 as shown below.

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The Avalon Barrier is suitable for Wind Category C (19mph) but does require additional ballasting for Category B (39 mph) and Category A winds (59 mph). 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

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#### AVALON BARRIER CONFIGURATIONS TO PASS WIND CLASSIFICATIONS FOR BS8442:

Configuration	Description	Cat C	Cat B	Cat A
1	2m Avalon	$\checkmark$		
2	2m Avalon + StrongWall Base	$\checkmark$	$\checkmark$	
3	2m Avalon in a square	$\checkmark$	$\checkmark$	$\checkmark$

## 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**

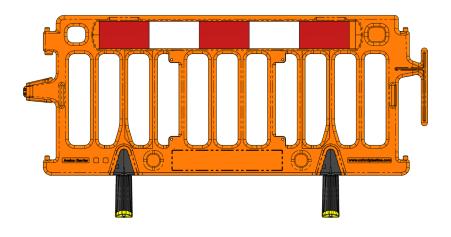
The manufacturer shall indicate the mass ballast to be added to each barrier assembly to resist a specified class of wind speed, depending upon the barrier configuration and the level of wind resistance chosen.

#### **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

## CODE COMPLIANCE



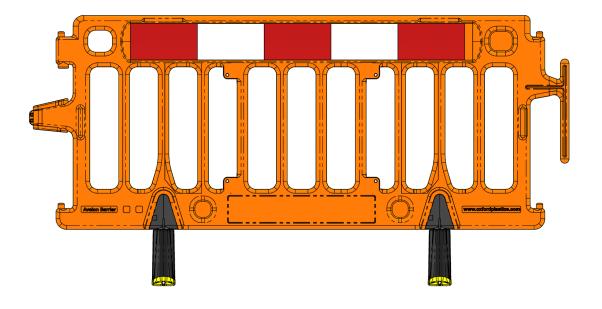


#### WHAT ARE STREET WORK REGULATIONS?

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 and anti-climb enhanced barriers that are 100% compliant with 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 Avalon Barrier system is Chapter 8 compliant for street works use.

## RECYCLABILITY



#### MATERIALS

The Avalon Barrier body is made from HDPE, with Standard feet made using recycled plastics and ClearPath Extra feet made using recycled plastics & HDPE. StrongWall Base Ballast is also made using recycled plastics.

All Avalon components are recyclable.

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



## **SUSTAINABILITY**

Oxford Plastics are dedicated to sustainability. We build the circular economy into our products by designing them to be easy to use, long-lasting, repairable and recyclable.

The Avalon Barrier, a Chapter 8 Barrier, is a much more sustainable solution when compared to non-repairable barriers.

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## Avalon Barriers reduce up to 30% of CO2e compared with non-repairable barriers\*.

\*Please refer to Oxford Plastics Carbon Footprint & Product Report for more information

Oxford Plastics Product Guidelines

AVALON BARRIER | TECHNICAL SPECIFICATION

## ASSOCIATED PRODUCTS

When setting up a street works site, other Oxford Plastics solutions can be used to ensure compliance is achieved. Browse our Chapter 8 solutions; including advanced barrier systems, trench covers, road plates, wheelchair ramps and street works signs.

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ADVANCED BARRIER SYSTEMS





PORTABLE GATE BARRIERS STREET WORKS SIGNS



## CONTACT INFORMATION

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