Advanced Polymer Traffic Barriers

ZERO WASTE technology substantially reduces the cost of installing and maintaining traffic barriers. Shock Absorbing Advanced Polymer Barriers are designed to outlast and outperform alternative means of protecting for your people & assets.

RED

- 2150mm L
- 900mm H
- 500mm W
- 20 – 327 kg

Water fill Barrier
5 Year Warranty

CODE: WFBR

WHITE

- 2150mm L
- 900mm H
- 500mm W
- 20 – 327 kg

Water fill Barrier
5 Year Warranty

CODE: WFBW

YELLOW

- 2150mm L
- 900mm H
- 500mm W
- 20 – 327 kg

Water fill Barrier
5 Year Warranty

CODE: WFBY

Our Advanced Polymer barriers were made to overcome many of the shortfalls of the many cheaply made imported barriers on the market- and hell, we need to buy local!

Our Heavy-Duty water filled barriers are both low cost and highly durable coming with a unique Five-year warranty providing a safety barrier you can trust, for pedestrian delineation, cordoning off no-go zones, drop offs, pits and traffic control.

SPECS

- 2150mm L x 900mm H x 500mm W
- Made from 25% recycled material
- Strength tested to AS/NZS 4766:2006
- UV20 Protection to ASTM D2565
- Weighs 20kg empty, 327kg full
- Australian Made

Features:

- 70mm filler, overflow and 50mm drain centrally located

- Light bracket moulded on top of barrier
- Recyclable – Eco Friendly
- Strong and user friendly
- No loose pins

Benefits

- Abrasion Resistant
- High impact resistance
- Low coefficient of friction
- Abrasion resistant
- Scratch and marking resistant Chemical resistant
- Water and moisture resistant
- UV Resistantshatter resistant
- Long-wearing
- Corrosion resistant

Advanced Polymer maximising life span

Our Australian made Advanced Polymer Waterfilled Barriers are an innovative Australian designed and manufactured barrier that has been built to withstand both impact and the harsh Australian sunlight. Available in highly visible red and white, and yellow, the strong UV-protected Advanced Polymer Barriers provide maximum protection against both impact and the harsh Australian sun.

Easy to Use
Each module weighs just 20 kg making it lightweight and easy to install and rounded corners make it safe and easy for workers to handle. A simple interlocking pin and hole system is moulded into each barrier module, resulting in a one-piece unit with no loose pins. Built-in handles help with the interlocking process and carrying the barrier when empty. They have large 70mm filler, overflow and 50mm drain centrally located for ease of use.

Impact Resistant
The weight of our barriers increases to a massive 327kg, when filled with water, providing a significantly stable and secure barrier.

Impact and UV Resistant
Made from material that is strength tested to Australian Standards.

Extras -Light up my life!
Lights and signage can also be attached, transforming the barriers into a 24 hour traffic control product.

UV Resistant

Our Barriers are made of a plastic material, but not all plastics are the same. You may have seen the effects on cheap plastic that is exposed to the harmful UV-rays of our Sun. Over time, they become brittle, fade and crack as the polymer elongation drops, that is, the structural integrity of plastic.

The natural conclusion is that plastic waster barriers won't last long in the Sun. This is just not true, especially not with our Advanced Polymer Barriers which are made from a new age plastic that can last 100 years or more.

The unique blend of HDPE, Ultra-High Molecular Weight Polyethylene (UHMW PE) thermosetting polymer and Rotathene® SUPA UV poly our Advanced Polymer Barriers and Bollard Covers have more than 4.5 times the UV8 protection required by Australian standard (AS/NZ 4766:2006).

What is UV Stabilisation?

Many metals will rust and corrode as they weather and wither away. Steel, however, can be strengthening against oxidisation when chromium is added or protected from rust and oxidisation using galvanising. There are different grades of stainless steel. Kitchen sinks, for example, are often made of a high-grade of stainless steel.

Similarly, UV stabilisers are to plastic what the chromium is to steel. When added to the polymer mix, the plastic is protected against becoming brittle in the Sun. UV stabilizers in the polymer protect the Barrier against the harmful UV rays, preventing it from bulging, warping, or going brittle over time, inhibiting and absorbing the harmful UV light that causes it break down. So, in the same way that some steels are called stainless, the UV stabilised poly is a type of "stainless poly".

SUPA UV Polyethylene

Australia experiences some of the highest levels of UV radiation in the world. As such, leading edge technology is required to ensure our barriers remain reliable and durable for a long time. UV8 level of stabilisation has been considered the minimum required for good long-term protection in Australia. Rotathene® SUPA UV, provides a much higher level of protection than the Australian industry standard (AS/NZ 4766:2006).

Through careful selection of a high-quality Polyethylene base polymer specifically designed for outdoor use, advanced additives such as UV stabilisers and antioxidants, pigmented "SUPA UV" provides a UV36 level of stabilisation.

Testing UV Protection Levels in Polyethylene

UV protection levels in polyethylene are assessed under highly controlled conditions of high intensity UV radiation with similar wavelengths to those from the Sun. Samples are removed from the UV weatherometer every few thousand hours and stretched in a tensile tester to determine how much they can still stretch.

This provides the % Elongation of the test sample. This value is compared to the value obtained for the set that was not placed in the weatherometer and recorded on a graph as the % Retained Elongation. The % Retained Elongation decreases as degradation increases. Once the Elongation drops to 50% the poly sample is deemed to have failed. After 36,000 hours of accelerated UV weathering, pigmented SUPA UV poly samples retained well over 50% of their original elongation properties.

Impact Resistant

Plastic materials are frequently used in construction, military and industrial applications that require impact resistance and toughness. As implied by the name, impact resistance is the ability of a material to resist both fracture and deformation when temporary force is applied.

High impact resistant plastics

Unlike steel Barriers (and most imported plastic Barriers on the market made from old fashioned plastics that over time fade and become brittle), our Barriers have unique properties and benefits that allow them to perform in demanding environments. Whilst the impact resistance of a plastic is temperature-dependent (becoming brittle below 15° , **HDPE** retains its properties in even low temperatures.

Heavy Duty Design

Unlike most plastic Barriers on the market with thin 1-3 mm wall thickness, our Barriers and Bollard Covers are rotomoulded from a solid piece of Advanced Polymer material, with heavy duty 7 mm walls which ensures that they are structurally sound and robust enough to withstand even the hottest summer sun.

Looking good is also important to us!

Solid 7 mm walls also ensure our Barriers remain looking good impact after impact. Made using a durable, versatile thermoplastic that offers fantastic impact resistance and tensile strength. Since its molecules are packed together so tightly, this material boasts incredible toughness and rigidity combined with the ability to absorb impact force.

RELEVANT SPECS

Tensile strength at 72°F: 1,400 psi
Tensile modulus: 57,000
Tensile elongation at break: 100%
Flexural modulus: 29,000 psi