



What is product stewardship and why it is important?

“Product stewardship is an approach to waste management that allows organisations to take greater responsibility for reducing the environmental and human health impacts of their products. Product stewardship is a crucial element in meeting Australia’s recycling and waste management challenges.

Each step in the life cycle of a product, from design to post-consumer management, can result in waste and sometimes human health impacts. By adopting product stewardship approaches, organisations have more control over the environmental and health impacts of manufactured goods and materials across their whole life cycle, from design and manufacture to use and disposal”.

Island Block & Paving’s commitment to product stewardship.

Island Block & Paving has a commitment to producing sustainable masonry products within the circular economy stream (see figure 1 below). Products at the end of their 100-year life cycle are managed so as they are recycled in a meaningful way with a focus on preventing and managing product waste. Reducing waste and creating a circular economy; a economy that emphasises reuse, repair and recycling to minimising environmental and health impacts within the Island Block & Paving business has been a focus for 30 years and will continue into the future. To ensure compliance, Island Block & Paving are committed to maintaining Global Greentag certification, Platinum Healthrate certification as well as operating under management systems ISO 9001:2015 and AS/NZS 4801:2001.

Island Block & Paving produces a range of environmentally friendly, sustainable building products known as the “Sustainable Products for the Future” range. These products include bricks, retaining wall blocks, building blocks and pavers. All these products include 40% recycled container glass aggregates collected from kerbside recycling, as a replacement for natural aggregates. This recycling conserves natural resources, reduces cement consumption (therefore CO2 emissions) and energy footprints.

Benefits from incorporating post–consumer recycled materials:

- Reduced landfill.
- Reducing the resources and energy required to source new materials.
- Conserving natural aggregates.
- Reducing total Portland cement usage therefore reducing carbon dioxide emissions.

Island Block & Paving’s Environmental Policy (IBP-PO3 <https://www.islandblock.com.au/wp-content/uploads/2019/07/P-03-Environmental-Policy.pdf>)

Island Block & Paving's Circular Economy
(Cradle to Grave)





PRODUCT STEWARDSHIP

DESIGN

- Design, Research & Development has a focus on using recycled aggregates such as recycled glass.
- Use of hazardous materials is controlled per ISO9001:2015.
- Products are designed to be as light as possible to minimise materials, any emissions, wastage, and product weight for customer handling.
- All products have a 15 mpa minimum strength allowing them to be reused at the end of their life cycle.

MATERIALS

- Recycled materials in manufacture include 40% recycled glass aggregates and 20% milled slag. Refer Global Greentag certification <https://www.islandblock.com.au/wp-content/uploads/2022/06/Global-GreenTag-Certificate-21-22.pdf>
- 40% conservation of natural resources achieved by using recycled glass.
- 40% reduction of container glass going into landfill.
- Use of hazardous materials is always controlled per ISO9001:2015 and Greentag Platinum Healthrate declaration <https://www.islandblock.com.au/wp-content/uploads/2021/05/PHD-2021-Sustainable-Products.pdf>
- Minimising cement usage is achieved by used cement replacements such as milled slag.

MANUFACTURE

- 100% of material waste generated in manufacture is stockpiled on site and recycled per ongoing arrangement with quarrying company Hazell Bros P/L and crushed into aggregates for reuse.
- Minimise packaging waste in manufacture, no packaging used.
- A reduction of energy consumption is achieved by using natural curing methods in kilns.
- 100% captured water is used in manufacturing.



PRODUCT STEWARDSHIP

LOGISTICS

- Manufacturing transport within Island Block & Paving- factory to onsite yard storage is controlled with efficient yard design to minimise distances from manufacturing plant to kilns to pallet storage locations prior to sale.
- Customer collection points/loading areas are central to the yard layout, so transport distance is minimised.
- Transportation via trucks to customer delivery addresses is always streamlined by going direct to site and using the largest trucks available to reduce handling.
- Repurposed wooden pallets are used in manufacturing; all pallets are returnable to Island Block & Paving for recycling within the production system.
- Interstate transport costs are minimised by using smaller lightweight purpose made 24 tonne capacity trailers that reduce shipping costs and emissions.

RETAIL

- To minimise any site cutting and site handling Island Block & Paving provide as light a products as possible available many different sized masonry products including full size, $\frac{3}{4}$ size, $\frac{1}{2}$ size and $\frac{1}{4}$ size units all compliant with AS/NZS 4801:2001 OH&S Management Systems.
- Corflu packaging is recyclable at Island Block & Paving sales outlets via purpose made recycle bins.
<https://www.islandblock.com.au/conditions-of-sale/>
- Island Block & Paving products have a 20 year warranty period <https://www.islandblock.com.au/wp-content/uploads/2019/07/P-06-Product-Warranty-Policy.pdf> .
- Island Bock & Paving where possible focus on paperless marketing. Website, QR codes, instructional DIY videos and all brochures and technical support online at <https://www.islandblock.com.au/>
- All masonry products (bricks, blocks, pavers) are a minimum of 15 mpa in strength, life span of 50-100 years and have many options available for re-use at the end of their life cycle. Typical uses are crushed aggregates for road base, construction fill, drainage material, decorative garden rocks etc. All major councils Australia wide accepts used masonry products for recycling at waste transfer stations. <https://www.islandblock.com.au/conditions-of-sale/>

USE PHASE

- Promotion to customers and the public on the benefits of consumers buying products with recycled content.
<https://www.islandblock.com.au/sustainable-products-melbourne/>
- Island Block & Paving products are manufactured to meet Australian standards for breaking load (strength), Abrasion resistance (wear) and Slip resistance. No ongoing product maintenance is required aside from water cleaning periodically.
- Island Block & Paving via experienced technical reps provide a technical support service to customers. Services include design advice; plan take offs and project set out advice to ensure minimal wastage and the correct Island Block & Paving product is selected for a customer's project.
- Commitment to a circular economy and promoting positive recyclability at the end of a products life cycle.
<https://www.islandblock.com.au/conditions-of-sale/>

POST CONSUMER

- Educate customers on the positive recyclability of masonry products at the end of a products life cycle.
<https://www.islandblock.com.au/conditions-of-sale/>
- Educate customers on typical uses at the end of the life cycle, namely crushed aggregates for road base, construction fill, drainage material, decorative garden rocks etc.
- All major councils Australia wide accepts concrete masonry products for recycling as well as recycling companies such as Hazel Bros and the Alex Fraser Group.
- Due to the product strength and lifespan of masonry bricks, blocks and pavers, there is a buoyant Australian market for used products and another option is to on sell via Facebook marketplace and Gumtree.



Figure 1 Brick/Block/Paver waste



Figure 2 Corflu recycling bin 1