



Trex's entire portfolio of products uses more than 95 per cent recycled content | Photo source [Trex](#)

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NOVEL WOOD DECKING MADE FROM PLASTIC BAGS

 PROPERTY & CONSTRUCTION

A decking company has developed a way to turn recycled plastic bags into a wood composite that can replace wood

Spotted: Wood decking is beautiful and versatile, but not very sustainable. However, a Virginia-based company has developed a way to make 'wooden' decking almost entirely from waste products. The company turns reclaimed sawdust and plastic bags into composite deck boards and is now one of the largest plastic bag recyclers in the US.

Trex's process is green from start to finish. Its proprietary processing method first cleans plastic film and grinds it into granules. These are then combined with sawdust reclaimed from factories, and the mixture is heated to give it a soft, pliable consistency. Profile dies are used to form the mixture into boards, which are cooled and cut to the desired length.

A standard, 16-foot board will use around 2,250 plastic bags, most of them the hard-to-recycle, thin-film type that is often used as sandwich bags, overwrap on kitchen rolls and as newspaper sleeves. To source the plastic, the company has set up its own nationwide recycling programme, with drop off points outside stores and in local communities and schools. Trex will also pay businesses that generate a lot of plastic waste to take the waste off their hands.

In comparison with a standard, pressure-treated lumber, the manufacture of the Trex boards releases 36 per cent fewer greenhouse gases and 47 per cent fewer toxic pollutants and uses 84 per cent less energy. Trex also operates a sustainable supply chain. [According to the company](#), "Approximately 95 per cent of our supply vendors are based in the U.S. We conduct supply chain assessments ... and work with our suppliers to reduce environmental impact across the supply chain. As a result, we make it a practice to use post-consumer and post-industrial content wherever possible."

Plastic has become a modern scourge, so it's no surprise that innovators are working on new ways to keep the material out of landfills and waters. Some recent ideas include [deodorant](#) made from

recovered ocean plastic and a [fashion house](#) that designs exclusively with recovered landfill plastic.

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Takeaway:

In addition to its sustainability, Trex claims that its boards don't warp and resist cracking, splitting, rotting, termites, mould, mildew and fading. They also need no chemical treatments and can be cleaned with soap and water. Although they cost more than pressure-treated wood, they also require much less maintenance. At around 140,000 plastic bags per 500 square-foot deck, the company has also found a way to turn unwanted and unsustainable materials into a useful product. This has not escaped the notice of consumers – sales were up around 18 per cent in 2020.