

# ReBond Product Info

At Modulex, we are determined to incorporate new materials which use waste from other industries to create new architectural signage solutions. Recycled and upcycled materials not only decrease waste levels but also help reduce the extraction of raw materials to make new products. ReBond is a material made from recycled carpet waste from carpets and a result of our ambition to create new products out of waste.

Carpets are popular in the cruise ship and hospitality industry due to their comfort, elegance, and warmth. However, due to the strict standards of the hospitality industry, carpets are replaced every few years, generating hundreds of tons of waste in the process. Modulex has collaborated with a Danish carpet manufacturer to address this problem by recovering and re-purposing carpet waste to create ReBond.



## Origin & Treatment

- Manufactured from pre- and post-consumer carpet waste collected in Denmark.
- Carpet waste is sourced exclusively from Cradle-to-Cradle certified products.
- Each sheet of ReBond is made from recycled carpet and thermoplastic binding fibres. Two outer layers of polyester and kraft paper are added, giving the material a strong, printable surface..

The production of ReBond starts by collecting carpets and recovering scraps from production waste, which are shredded into fine fibres using innovative technology. The shredded textile fibres are mixed with a binding fibre, giving the consistency to create felt mats. Each mat is made from 75 % carpet waste and 25 % binding fibre. These felt mats are then pressed into sheets under high temperatures, with a white polyester and kraft paper layer on each side. The result is a 3 mm material suitable for indoor use.

## Manufacturing and Production

- Signage production takes place at the Modulex factory in Billund, where all our electricity is 100 % carbon neutral.
- Printed graphics are UL Greenguard Gold Certified.
- ReBond signage is suitable for indoor use in non-humid areas.

ReBond sheets will be cut and routed in our factory in Billund. Graphics and texting will be added with endless possibilities. This material is suitable for any printing technology, from UV-print to eco-solvent, 3D print or vinyl graphics.

## Disposal

At end-of-life, ReBond signs can be incinerated locally with energy recovery. Moreover, the possibility of re-introducing ReBond scraps into the same recycling process is now being explored.

## Why choose ReBond?

Making new materials out of waste reduces the volume of primary resources extracted to create new products and, in turn, reduces the amount of waste sent to landfill or incineration.

ReBond has enabled Modulex to successfully re-use waste to create new products. Formerly in a hotel or cruise ship, carpet waste is given a second life and upcycled as signage.

- Endless possibilities for indoor signage, visual communication, and other elements such as door or wardrobe hangers.
- ReBond helps reduce the extraction of primary resources and reducing the amount of carpet waste sent to incineration or landfill.



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