

# The Fixhub Materials Library

## THE GREAT RECOVERY SELECTION, ON LOAN FROM RSA

The knowledge of materials is fundamental to any making. Understanding capabilities and limitations of materials is a crucial part of the knowhow of people who repair, mend and fix. The Materials Library at the Fixhub includes examples that offer opportunities or challenges. Compiled with the generous shared knowledge and support of the Royal Society of Arts and the Institute of Making.

The Great Recovery project, as is the Fixhub, is deeply committed to understanding and communicating the impact of choice of using one material over another. The materials they have selected to share with the Fixhub are those that obstruct or enhance sustainable circular economy.

### 1. NEODENIUM

The strongest magnet on Earth, used inside electronic appliances such as laptops. A rare metal becoming scarce because the appliances go to landfill.

### 2. LATEX DUST

The left over from the glue holding carpets together after it has been recycled. Currently no alternative uses have been found for this dust.

### 3. RECOWOOL

Highly insulating material made from 100% recycled carpet fibres with a low carbon manufacturing process that uses no water. Can be recycled again into new underlay after use.

### 4. WASHED HDPE FLAKES

High-density polyethylene flake made from sorted, granulated milk bottles. Can be made into new milk bottles and other applications, e.g. piping. Must be mixed with 30% virgin material in order to remain effective.

### 5. HOWIES DENIM

Made from recycled green PET soda pop bottles (21%), cotton (78%) and elastane (1%). With 5-6 bottles in each pair, these jeans will last longer than 100% cotton pair, with a lower carbon and water footprint. Howies is a UK-based clothing company that promotes low impact manufacturing.

### 6. MERINO WOOL

Sheep wool that is naturally insulating, breathable, flame retardant, odour resistant, and antibacterial – as well as silky soft. Very long lasting if consumers do not shrink it in the wash.

### 7. LEFT OVER MATERIALS FROM DAILY LIFE

Consumer behaviour is key to circular economy. The Great Recovery team has selected a few examples of common objects and materials that represent opportunities and challenges for the environment.

A faded bra and a single shoe are not appealing for the user and will often go to landfill whereas they are surprisingly valuable in many ways as raw materials or for other users. So are old winter coats which as a complex garment offer many layers of materials. Large amounts of dry paint is left over from finished jobs and little is known that companies like New Life Paints in the UK recycle and put left-over paint back on the market.