## Alcove Highback

Design: Ronan \& Erwan Bouroullec


## SUSTAINABILITY

For Vitra, environmental, economic and social conduct begin with the individual. In order to develop, manufacture and market dependably long-lasting and environmentally sound products, Vitra complements this key factor of individual initiative with regular audits of the company's standards by independent review entities.

## VITRA AND THE ENVIRONMENT

Vitra has manufactured furniture designs by Charles \& Ray Eames and George Nelson since 1957. Building on this foundation over the years, the company has developed a wide range of furnishings for the office, for the home and for public spaces in collaboration with progressive designers.

Since 1997 Vitra has implemented a certified system for quality and environmental management according to the standards of DIN EN ISO 9001 and DIN EN ISO 14001.
Vitra is committed on all levels to reducing the use of
energy, raw materials and other resources - thereby reducing the environmental impact caused by emissions, waste water and waste materials. The most important contribution of Vitra to environmental sustainability, however, is the high quality and enduring design of its longlasting products. The unusually long life cycle of Vitra products is ensured by aesthetics that do not follow temporary trends and fashions, and also by a careful selection of materials and the use of innovative technologies. The longevity of Vitra products is increased by the replaceability of wearing parts.

Trucks are to leave Vitra production sites preferably with a full load; the use of returnable packaging is being constantly increased. Preference is given to rail transport; overseas cargo is sent by ship and special transport is avoided. Vitra uses environmentally friendly materials for packaging and minimizes the volume of packaged products to make efficient use of the loading space in truck trailers and shipping containers.

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## MATERIALS

Aluminium is light and durable. Die-cast aluminium components by Vitra are principally made out of remelted alloys which are largely recycled material. When remelting recycled aluminium there is an energy saving of 94\% compared to the production of primary aluminium. Aluminium components are $100 \%$ recyclable.

Steel is a stable compound of iron and carbon with various added alloys. As the technical properties such as strength and elasticity can be adjusted according to the steel grade, the material can be used flexibly in many different forms. At the end of the product life cycle, steel components can be melted down and completely recycled.

Polyurethane - Vitra uses this material primarily as permanently elastic soft foam in the production of covers. CFCs have not been used to expand polyurethane upholstery since as early as 1989. Polyurethane foams are mostly recycled thermally to generate energy or as a composite.

Polyamide is a very strong thermoplastic synthetic material. With the addition of a small amount of new material, polyamide can be $100 \%$ recycled. In order to facilitate single-variety separation and recycling, all plastic components that are large enough are labelled according to ISO 11469:2000.

Polyester is used first and foremost for cover fabrics and non-woven fabrics at Vitra. All cover fabrics undergo strict quality control tests and satisfy the ecological criteria of the German Consumer Goods Ordinance. Polyester is a thermoplastic and can be remelted. However, cover fabrics are generally used thermally or as a material.

Wood and wood products: Wood is a renewable, natural raw material. Wood products like chipboard and MDF have the advantage that they can be processed more easily and flexibly than wood and do not deform at different moisture levels like solid wood. In the production


Alcove Highback Three-Seater (20132100)
Cover fabrics will be separated into synthetic materials and natural fibres, depending on the material.
of wood products we partly also use surplus wood from the wood industry and thus help preserve valuable resources. All the wood products used by Vitra satisfy the emission category El and therefore emit less than 0.1 ppm formaldehyde.

## RECYCLING, PACKAGING AND REUSE OF PRODUCTS

Once a product reaches the end of its life cycle, it must be disposed of.

## Recyclability:

Alcove Highback Sofa is up to $56 \%$ recyclable when fully separated. Vitra understands the term recyclability to signify only melting down and reuse of raw materials. Polyurethane and wood products, for example, cannot be melted down. However, these materials can be used thermally to generate energy or can be crushed and recycled as materials.

## Proportion of recycled material:

Alcove Highback Sofa contains up to $13 \%$ recycled material. Using recycled materials conserves valuable resources. With their proportion of recycled material, among other things, Vitra products can contribute to a good rating in certification programs for sustainable buildings (for example LEED). We will be happy to assist you should you require more information on this subject.

## Packaging:

Alcove Highback Sofa will be delivered disassembled. Back and side elements are separately protected in polyethylene bags, packed in a cardboard box. Basis element and base is packed in the same cardboard box, protected by polyethylene dustcover. Seat, side and back cushions are separately protected in polyethylene bags, packed on top in the cardboard box.

## CERTIFICATES

GREENGUARD Indoor Air Quality Certified

