do better







Do look back

When we designed **Do** originally, our goal was to deliver great design, comfort and ergonomics, in a product that was also built to last and easy to service on site.

When it comes to materiality, we told ourselves that, “stuff is hard to come by, so use it wisely”. This developed into the mantra our design team have lived by ever since, “more from less”; a challenge to squeeze the greatest design value out of the least amount of ‘stuff’ in every product.

Do has been our

best-seller every year

since its launch, with over 800,000 chairs sold worldwide. Time and time again, **Do** has proved itself to be a product our customers can trust. So why change it?























Let’s start with the why?

While our concerns about population growth, resource depletion and climate change drove the original design of **Do,** few of us would have predicted the accelerated impact these issues would be making on the world just one decade later.

The global, shared responsibility to combat climate change and biodiversity loss means that deep decarbonisation is a key aim for our business over the coming decade, and it’s this important goal that’s driven us to re-formulate the “stuff” of **Do**, with a view to dramatically reducing its carbon footprint.


seat height





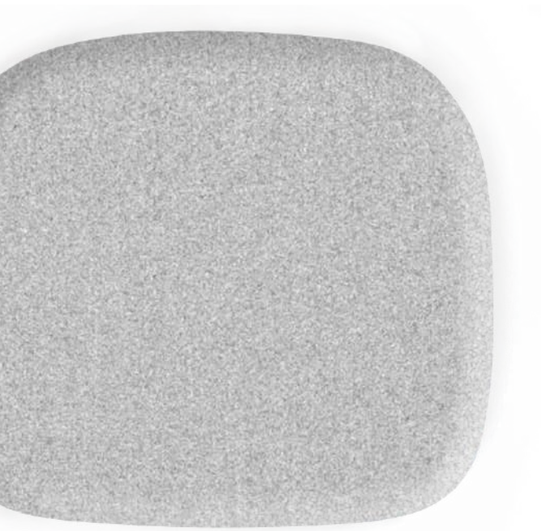








Re-invent simple







Orangebox products are designed and built in the UK, and local manufacturing is, and always has been, important to us...



so if we're to be competitive we need to use materials economically, and design our chairs to be quick and easy to assemble. This has meant taking a completely fresh look at task chair design and at what can be done to re-invent simple, all while continuing to deliver great quality and performance.

Do better recipe

for a task chair with height adjustable arms

Serves.
pretty much everyone
(its very adaptable)

Prep time.
6 mins
(it goes together real easy)

Cooking time.
20 seconds at 120°C
(to tension the mesh)

Notes

Add fabric to taste (we suggest any made from 100% post-consumer recycled polyester as a great low-carbon option)

Recycled Content

58%

Recyclable Content

98%

Carbon Footprint

40.6kgCO_2e

Ingredients

5942g	Nylon (recycled polymer content between 70% and 95%)
3372g	Steel (typical recycled content around 56%)
2504g	Polypropylene (between 50% and 75% recycled content)
911g	Aluminium (recycled content around 96%)
680g	PU foam (free from halogenated fire-retardants)
427g	TPU (virgin polymer currently but we're working on a recycled alternative)
120g	Polyester mesh
50g	Low density polyethylene (30% recycled content)
43g	POM (virgin polymer)
10g	Reconstituted foam (100% recycled, free from Persistent Organic Pollutants)
7g	Natural rubber

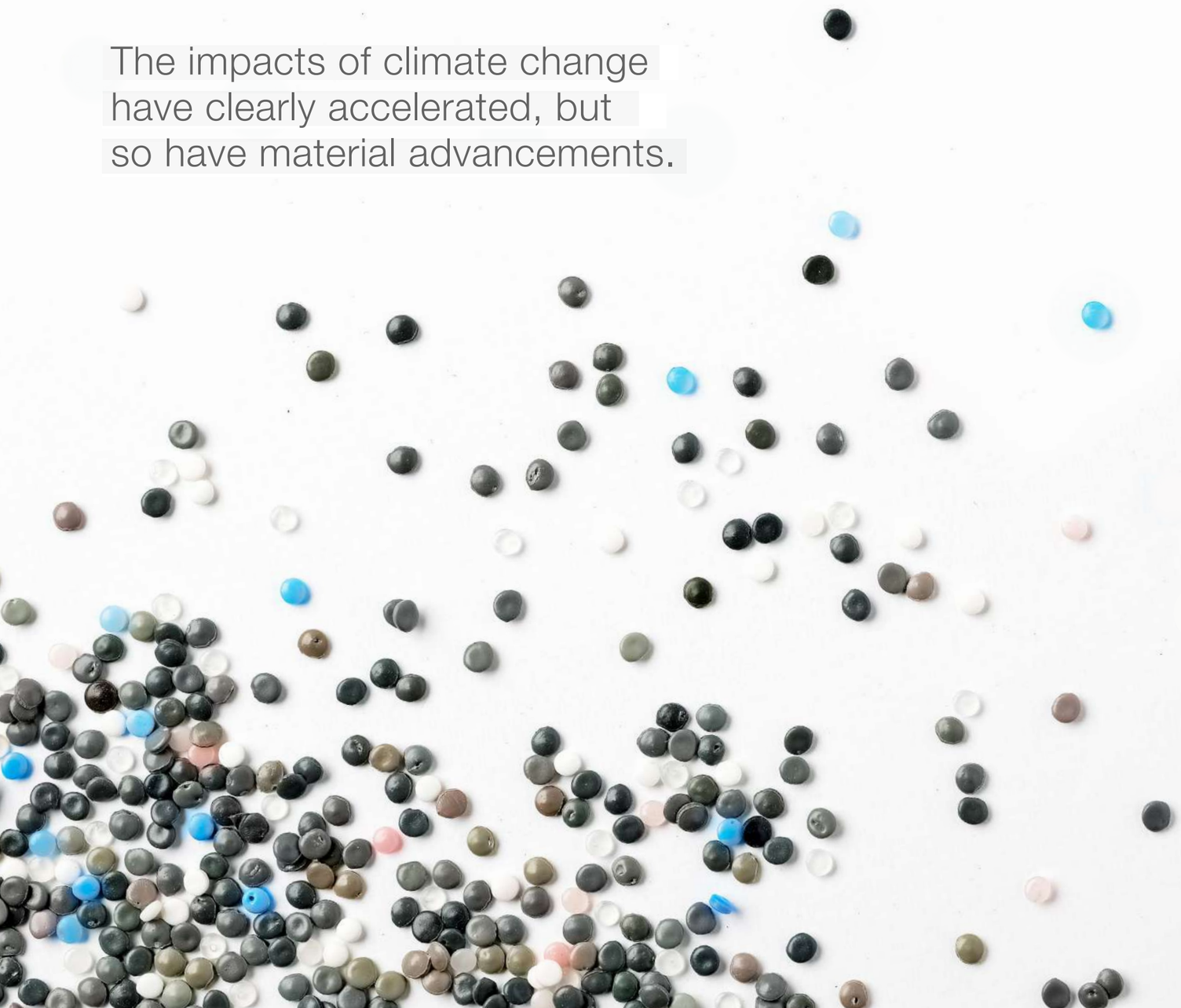
40% less CO_2e





materials matter

The impacts of climate change have clearly accelerated, but so have material advancements.



Developments in the strength and consistency of recycled polymers now allow us to deliver the same quality and performance with a fraction of the carbon footprint.

Do chair sales account for a large proportion of our total emissions, so any reduction we make to its footprint will have a huge positive effect, for us, for our customers and for the environment.

Do's de-carbonisation has focused on three key waste streams to supply the recycled materials we're now using:

Pre-consumer waste

Waste generated from a variety of manufacturing processes – for example, waste fibres and yarns from the production of carpets and vehicle airbags – that can be re-used as feedstock for the creation of new materials.

Post-consumer waste

Waste materials from our domestic recycling – for example, packaging used for food or for cleaning products like washing-up liquid or shampoo bottles – that can be recovered and reprocessed.

Landfill waste

Waste materials that were historically deemed economically unviable for recovery but that are now being reprocessed into high quality materials for reuse; their organic elements isolated and reformulated in combination with recycled polymers. This not only reduces the use of virgin materials, it also avoids the significant methane emissions that would have been generated if the waste had been left in landfill.



As a manufacturing business, the materials we use have the largest influence on our overall carbon footprint.

The design of the **Do** chair has always had sustainability at its core, with de-materialisation and design for service & re-use as key drivers from day one.

Carefully reassessing the most sustainable polymer grades available today has allowed us to **Do** better. We've significantly increased the amount of recycled content and reduced the embodied carbon, with no reduction in function or performance.

With polymer materials making up 64% of the **Do** chair (by weight), the carbon intensity of the plastics we use makes a big difference to the embodied carbon in each chair*

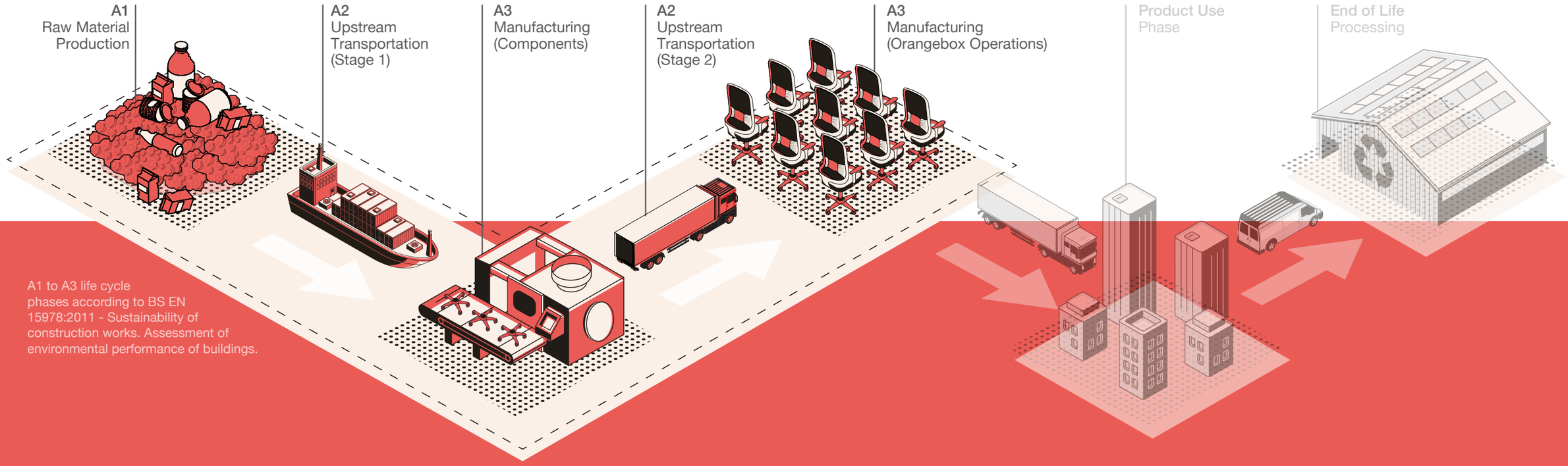


Product carbon footprint

Do-HBA Carbon Footprint (Black)

Raw material production	65%
Upstream transportation	7%
Manufacturing	28%





A1 to A3 life cycle phases according to BS EN 15978:2011 - Sustainability of construction works. Assessment of environmental performance of buildings.

Raw Material Production

Emissions generated from creating the raw materials used in the chair, principally technical polymers, steel and aluminium. Using recycled material grades has helped us significantly reduce this element of the footprint.

Upstream Transportation

Emissions generated from the transportation of raw materials and component parts before final chair assembly at *Orangebox*.

Manufacturing

Emissions generated from component manufacturing. Principally from the energy used in injection moulding plastic parts and pressure die casting aluminium components.

+

Emissions generated from *Orangebox* operations.
(Allocated pro-rata by product weight.)

- Gas and Electricity
- Internal Waste
- Vehicle-fuel use (scope 1)
- Employee Commute







component manufacture

In order to more accurately ascertain what emissions are generated during **Do**'s manufacture, we've been working closely with our supply chain to capture exactly how much energy is used during the production of the majority of its parts. Once we know how much energy is used per kg of material, we can convert that to a greenhouse gas impact using emission factors published by DEFRA.

Where appropriate the measured values also capture energy use from robots, material driers & re-granualtors.

Chair Component Part	Moulding Press Size (tonnes pressure)	Energy Use (kWh/kg)	Part Weight (kg)	Manufacturing Impact ($kgCO_2e$)
Back frame	1000	0.58	2.15	0.2411
Upholstery plate	240	0.53	0.46	0.0476
Lumbar pad & grips	180	0.27	0.19	0.0184
Arm pad outers	180	0.62	0.14	0.0136
Arm pad inners	180	0.50	0.18	0.0179
Arm shrouds	180	0.90	0.47	0.0815
Arm supports	180	0.45	0.79	0.0686
Arm triggers	120	0.33	0.06	0.0082
Seat pan	500	0.34	1.43	0.0948
Seat upholstery plate	240	0.31	0.61	0.0625

materials matter

Nylon (Polyamide)

We employ various grades of nylon polymer in our task chairs and it is used in the mechanism, 5-star base, back-rest, seat and arm assemblies of **Do** better. When mixed with glass (in either bead or fibre form), nylon materials are stiff, extremely strong, and resistant to impact, all properties that are needed for these types of application.

The nylon grades we're now using have very high levels of recycled content and are manufactured from post-industrial nylon-fibre waste. The recycled feedstock comes from various industries, all producing large volumes of waste as a consequence of their primary manufacturing process. This ensures the feedstock is clean, consistent and contains little variance. This consistency allows the recycled grades to deliver reliable mechanical and cosmetic properties from batch to batch.

Black grades of recycled nylon can utilise a larger range of feedstock colours, allowing for at least 95% recycled content. This results in a carbon footprint of just under 0.8kgCO_2e/kg of material. White grades of recycled nylon require a more selective feedstock and the addition of 30% 'prime' polymer to ensure a pure white appearance. This results in a higher carbon footprint of 2.4kgCO_2e/kg of material. Both options, however, offer huge improvements over the footprint of virgin glass-filled nylon, which is typically around 6kgCO_2e/kg.

Polypropylene (PP)

In areas where high-stress resistance is less critical, we're able to use polypropylene (PP), which is typically lighter and more cost-effective. As with nylon, the pure polymer is often mixed with other materials (glass or mineral talc for example) when we need to improve a particular mechanical property, like 'stiffness'.

Recycled PP feedstock can come from post-industrial sources (commonly the automotive and consumer electronics sectors) but is also generated at scale from post-consumer waste, as PP is often used for the packaging of domestic cleaning products and foodstuffs.

Post-consumer waste from mixed domestic recycling is carefully sorted by size, material type and colour, using several automated techniques, alongside some manual sorting. This process can separate out the PP (and other common polymers like polythene & PET) to give a material purity level of up to 98%.

The carbon footprint of the black recycled PP grades we're now using is 1kgCO_2e/kg – approximately one third of the footprint of virgin material. As with the nylons we're using, recycled grades of white PP have a slightly higher footprint (1.1kgCO_2e/kg) because more 'prime' material is needed to ensure a bright colour in the finished product.

Our recycled nylon and recycled PP materials are sourced from German manufacturer MOCOM, who specialise in the supply of sustainable polymers and have a gold EcoVadis rating.



rethinking how things are made

UBQ™ is a sustainable plastic substitute made entirely from organic and unrecyclable household waste – everything from banana peels and chicken bones to baby diapers and mixed plastics that have not already been captured by traditional recycling methods. UBQ's patented process converts waste into a climate-positive thermoplastic material that we can then use in our furniture.

The sole feedstock used in UBQ's conversion process is household waste, which is largely comprised of organic materials. Metals and minerals, which have high recyclability, are removed, and sent over to traditional recycling streams. All that remains is transformed into UBQ™ – so nothing goes to waste. UBQ's conversion technology breaks down the organic matter into its basic elements; lignin, cellulose, fibers, and sugars. The process then reassembles these elements into a matrix, and any remaining plastic fragments melt and get mixed-in to create a novel thermoplastic material.

As opposed to conventional chemical recycling systems that utilize high temperatures, UBQ's process requires significantly lower temperatures and energy. In 2021 solar arrays generated 100% of the energy required to produce the material.

Within Do-Better, we are using UBQ™ material to reduce the carbon footprint of our seat-pan by replacing the mineral talc that is normally added to the polypropylene, resulting in approximately 80% PP and 20% UBQ™. The PP contains 75% recycled content, of which 90% comes from post-consumer waste.

Every kilogram of UBQ™ diverts roughly 1.3kg of waste from landfills or incineration, while also preventing up to 11.7kg of CO_2eq (GWP20) into the atmosphere.

By using UBQ™ within our components, *Orangebox* is helping tackle the waste crisis, preventing greenhouse gas emissions, reducing reliance on fossil fuels, and ultimately contributing to the establishment of a more circular economy.







The fact that people come in all shapes and sizes makes simple, adaptable seating essential in shared workspaces.

Do offers a greater range of adjustment, delivered more simply and with fewer controls. This means it’s easier to use and a better fit for more people.



Do is simple and intuitive to use. Our refined, user-centred approach to design means there’s no longer a multitude of knobs and levers to find and interpret.

We’re pretty certain there’s no one perfect seated position, and in fact we believe that movement is the key to keeping us alert and in good shape through a long working day. With no back-lock as standard, the do chair encourages movement and blood flow, while always fully supporting you.

user centered design



Our user-centred approach to design means there's no longer a multitude of knobs and levers to find and interpret, this makes the chair much easier to use.

Because the mesh textiles on the chair's back-frame adapt to each user's body shape, they always provide great support. The single skin mesh also offers better temperature control and breathability than a traditional upholstered back.

Good lumbar support is an important factor in delivering great comfort, so we've included this as standard. Our flexible lumbar pad has 100mm of adjustment and is easy to reach and to operate when you're sat in the chair.

Do's seat controls are intuitive and simple; if it moves the seat, then it's on the seat, with seat-height adjustment on one side and seat-depth adjustment on the other.

Because the weight balancing mechanism automatically adapts to any size of user, there's no need for tension adjustments and complicated chair 'set-up'. The optional travel limiter allows the back to recline to three different angles, while ensuring that it can only ever be locked in the upright position.





Better by miles

Orangebox products are designed and built in the UK and local manufacturing is important to us.

We reduce upstream transportation impacts through carefully sourcing raw materials and manufacturing component parts locally to us. Around 45% of component parts are manufactured within 10 miles of our factory in South Wales, and over 90% come from within mainland Europe.

Transportation accounts for one of our largest sources of greenhouse gas emissions.

Our long-term aim is to end our reliance on fossil-fuel haulage, but that takes time to address. In the meantime, we're working hard to reduce our supply-chain impacts through smarter procurement and design.



Orangebox chairs are delivered by our own fleet of vehicles. This allows us to actively measure and optimise load utilisation, and use route planning software to maximise fuel economy. All our trailers have aerodynamic exteriors and interiors adapted to suit the transportation of furniture, with features such as double-deck flooring to help maximise load capacity.



bag vs box

We package our chairs in a polythene bag rather than a cardboard box for all UK deliveries, because **the carbon footprint of the bag is around 100 times lower than that of a box.**

It also means we can deliver more chairs on each load, further reducing transportation impacts. We ensure a minimum of 30% recycled content in our bags and work to hard to recover and recycle every bag we possibly can.



box clever

Where chairs are being delivered outside the UK, **Do**'s simplified design and assembly means we're able to offer export packaging solutions with lower cost and environmental impact.

A partially assembled **Do** chair can be shipped in around half the size of a typical chair box, and fully assembled in less than 2 minutes using just an Allen key.



No matter how good a product is, there comes a time when its first useful life comes to an end.

Our aim is to promote closed-loop cycles of use for all the materials we've used, so, to get the most from the resources invested in every **Do** chair, we've taken steps including dematerialisation, design for disassembly and material identifiers on large parts.

In support of this, we have a robust remanufacturing service, **re-made** by *Orangebox*, which prepares existing *Orangebox* products for their next life. Our **re-made** furniture provides the same reliable performance but with a greatly reduced carbon footprint compared to new.
All **re-made** items are supported by an *Orangebox* warranty.







Do-HB
W660/D660/H970mm



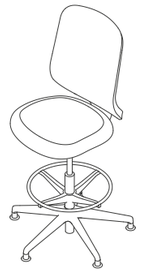
Do-HBA
W660/D660/H970mm



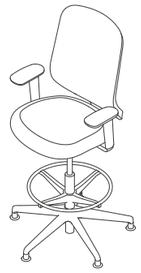
Do-HBH
W660/D660/H1180mm



Do-HBHA
W660/D660/H1180mm



Do-HBC
W660/D660/H1240mm



Do-HBCA
W660/D660/H1240mm

Chair range designed to conform to the following
British, European & American Standards.

BS EN 1335 - 1 : 2000	Part 1 – Dimensions, determination of dimensions Part 2 – Safety requirements Part 3 – Test methods
BS 5459 – 2 : 2000 & A2 2008	Specification for Performance Requirements and Tests for Office Furniture.
BIFMA G1 – 2011	Ergonomics Guideline for Visual Display Terminal Furniture used in Office Spaces
BS EN ISO 9241-5:1999	Ergonomic requirements for office work with visual display terminals (VDTs). Workstation layout and postural requirements

Outer frame



black outer frame



white outer frame

Adjustable arm



black height adjustable arm



black multi-adjustable arm with black arm support



black multi-adjustable arm with polished arm support



white height adjustable arm



white multi-adjustable arm with black arm support



white multi-adjustable arm with polished arm support

Mesh



technical mesh



upholstery mesh



sheer mesh

Trim



black



grey



white



black nylon base with 50mm castor



black nylon base with 65mm castor



polished aluminium base with 65mm castor

Base

STANDARD PRODUCT SPECIFICATION

Weight balancing synchronous mechanism (no back lock)
26” black nylon base (with black gas lift)
65mm castors
Sliding seat (76mm of travel)
Adjustable lumbar pad (100mm of travel)

OPTIONS

Mechanism with travel limiter / back lock
Polished aluminium base (with 65mm castor & brushed steel gas lift)
50mm castor (for nylon base)
Multi-adjustable arms (aluminium arm support)
Width adjustment on arms (std & multi-adjustable)
Luxury upholstery
Glides

VITAL STATISTICS

User weight range:	50kg to 150kg
Seat height (task):	405mm to 535mm
Seat height (counter):	680mm to 940mm
Seat depth adjustment:	76mm
Seat cushion width:	520mm
Seat cushion depth:	470mm
Lumbar height adj:	100mm
Effective seat depth:	400mm to 476mm (lumbar point to front of seat foam)

Height adjustable arm (standard)
Arm height adjustment: 100mm
Arm width adjustment: 35mm (option)

Multi-adjustable arm (option)
Arm height adjustment: 70mm
Arm width adjustment: 35mm (option)
Arm-pad rotation: 180 deg (with auto safety lock)

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