

# ACX

Antonio Citterio 2023



**vitra.**

# The new generation of office chairs

ACX is the tenth office swivel chair that Vitra has developed in collaboration with Antonio Citterio. With its automatic synchronised mechanism, the compact ACX offers maximum comfort for every user – while exhibiting a distinctly non-technical appearance. The construction, materials, production, logistics and maintenance of ACX are designed to achieve a long life cycle with the smallest possible carbon footprint.

The ACX mechanism automatically adjusts to a wide range of user weights: even lightweight and heavier individuals can sit down and enjoy instant comfort and optimum support throughout the full scope of movement, without having to adjust anything except the seat height. That makes ACX particularly suitable for environments in which dynamic collaboration processes have replaced sitting for long periods in the same chair.

The design of ACX features a limited number of components, which simplifies service and maintenance. The parts are made of recycled materials whenever possible – up to 60% depending on the model – and can be easily separated and recycled again at the end of the product's life. Depending on the chosen model, ACX is therefore up to 100% recyclable.

ACX has a casual and relaxed appearance: with its clean lines and choice of knitted fabrics in a wide selection of colours, it functions as a design element in the office – instead of a necessary addition tolerated for the purpose of ergonomics.

ACX is the ideal chair in any setting that calls for healthy ergonomic seating with an understated inviting aesthetic along with a focus on longevity and compliance with stringent ecological standards.

ACX Mesh

ACX Light

ACX Soft

# ACX Mesh

ACX Mesh differs from the two other models in the task chair family – ACX Light und Soft – in that its backrest has a knitted fabric cover. This semi-transparent mesh textile is made of recycled polyester and comes in a choice of seven colours – which combined with either a dark or light frame enables numerous variants. The seat cover can be selected in a complementary knitted fabric or in the textile Plano.



# ACX Soft

ACX Soft stands out from the other two models in the ACX family – Light and Mesh – in that its backrest has a padded knit cover. This soft comfortable textile made of recycled polyester lends the task chair a particularly inviting appearance. Available in a choice of seven colours, the knitted fabric can be combined with a light or dark chair frame, allowing for a wide variety of configurations. The seat cover can be selected in a complementary knitted fabric or in the textile Plano.





# ACX Light

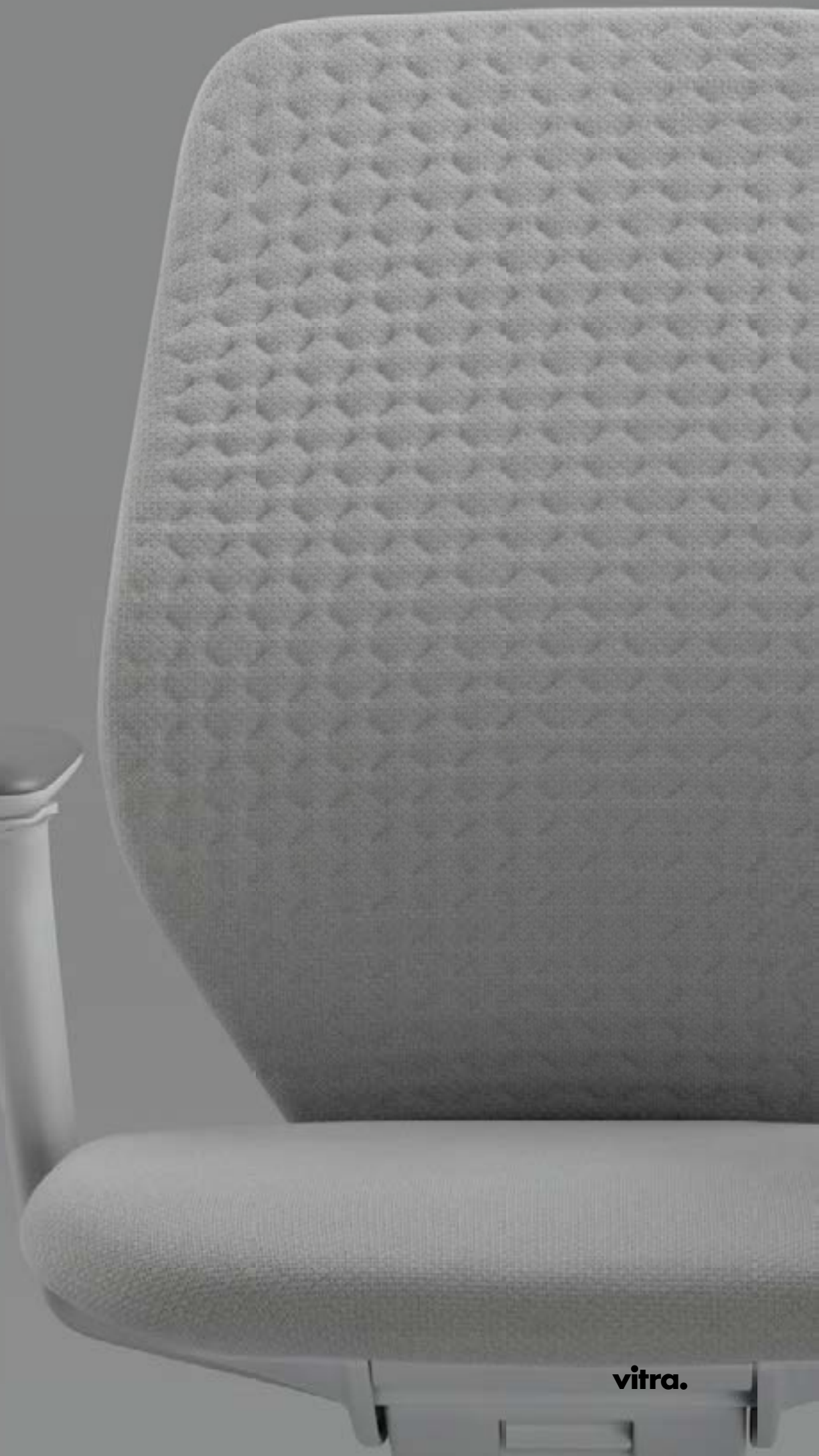
ACX Light is the entry-level model in the task chair family and available only in black. It differs from ACX Mesh and Soft through its backrest, which has a standard mesh knit cover. Combined with a seat in the technical spacer fabric Silk Mesh, the chair is designed to offer pleasant comfort and facilitate air circulation.





'The ACX is my tenth office swivel chair with  
Vitra and embodies the extensive know-  
how acquired throughout 30 years of close  
collaboration'

Antonio Citterio



# Natural colours

The muted colours come in a range of natural tones, some exhibiting a slight melange effect, and are perfectly compatible with both the dark and light-coloured frame.





# Sit & work

Automatic,  
quick,  
simple and ergonomic



# All-inclusive

The ACX cleverly conceals everything it can do: the operating elements for all functions are seamlessly integrated into the panel under the seat. When the seat depth is adjusted, the control levers 'slide' forwards and backwards with it and the functions are triggered via Bowden cables. The mechanism is available with or without forward tilt, while the other features – height, seat depth, backrest lock and two backrest resistance settings – are always included.



Depending on the version, ACX complies with the latest office chair standard EN 1335-1:2020 type A and offers the following functions:

- ✓ Seat height and seat depth adjustment
- ✓ Optional forward tilt with backrest lock
- ✓ Automatic backrest resistance plus choice of two weight settings
- ✓ Backrest lockable in upright position
- ✓ Lumbar support
- ✓ Height-adjustable armrests or 3D armrests

# Automatic weight adjustment

The ACX mechanism automatically adjusts to a wide range of users: whether they are light or heavy, small or tall, people can sit down and enjoy instant comfort and optimum support throughout the full scope of movement, without having to adjust anything except the seat height.





## The two-piece backrest



The lower part of the ACX backrest is a frame construction that provides lumbar support and optimum air circulation. The upper part has a shell construction, offering great freedom of movement in the upper back and shoulder area unhindered by a frame. A mesh or knitted cover is stretched over this structure.

It is only by ingeniously combining the advantages of both constructions – frame and shell – that the backrest has such a compact design without sacrificing ergonomic comfort. The result is an inviting yet understated aesthetic.



# Reduce

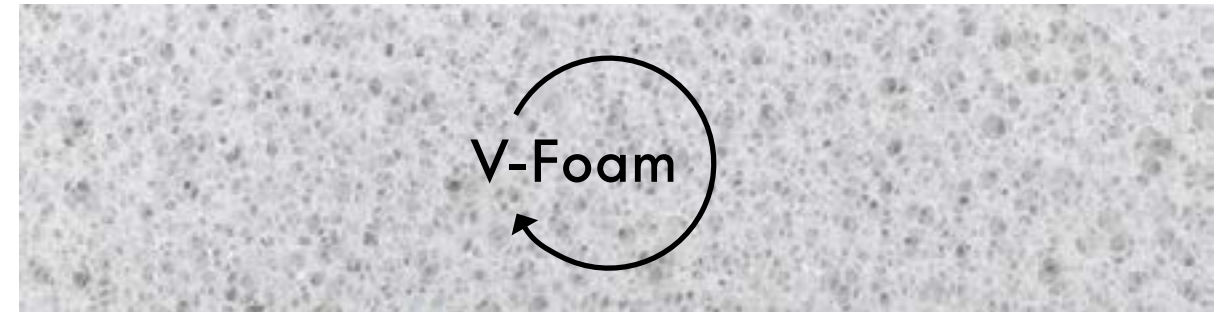
Saves time,  
space,  
money  
and reduces CO<sub>2</sub>





# Fully focused on a minimal footprint

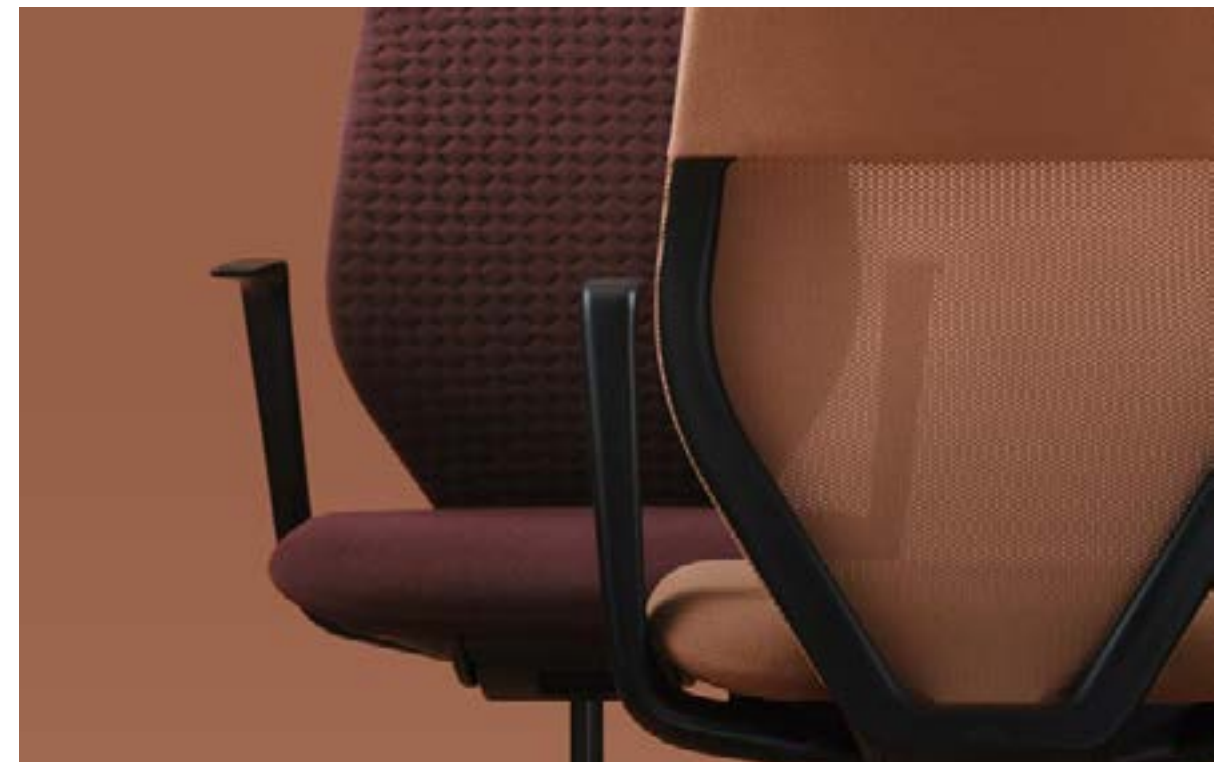
ACX saves time, space and money, while also reducing CO<sub>2</sub>. It adapts instantly to the user, providing perfect ergonomic comfort. Its design is reduced to the essentials with just a limited number of components, which simplifies service and maintenance. The parts are made of recycled materials whenever possible and can be easily separated and recycled again at the end of the product's life.



Developed jointly by Vitra and BASF, V-Foam is the world's first economically recyclable polyurethane foam.

Standard polyurethane foam (PU foam) is derived from fossil fuels and utilised extensively worldwide. Its recycling process is very energy-intensive and uneconomical.

V-Foam, on the other hand, can be melted, reprocessed and returned to the material cycle in its entirety for use in new products. Vitra will gradually incorporate V-Foam for all its upholstered furniture containing moulded foam from 2025.



**Knit cover** The backrests of the ACX Mesh and Soft models have a three-dimensional form-fitted knit cover, which is pulled over the frame. The knitted cover is made of 100% recycled polyester. The knitted seat cover complements the two available backrest covers. The muted colours in natural tones, some exhibiting a slight melange effect, are perfectly compatible with both the dark and light-coloured frame.

**Armrests** The armrests are available in 3 versions: fixed height, height-adjustable and 3D.



**ACX is your 10th task chair for Vitra. Can you tell us something about this impressive collaboration?**

**Antonio Citterio:** Design is never a solitary exercise – it’s an integral part of the industrial production process. In my way of working, it would be impossible to imagine a product without starting with knowledge of the production technology. Design is not just a problem of expression, but something that encompasses all the different processes that go into a project. The designer needs to have an aesthetic vision and be actively involved in the process throughout the entire production cycle. And after 30 years of collaboration, I can say that this 10th task chair with Vitra is the result of continuous development, shared knowledge and a close, lasting partnership.

**How has the development of a task chair changed since you started working with Vitra three decades ago?**

**AC:** Compared to the mid-1980s, sustainability and the final cost of a product have become increasingly important issues. Nowadays, competition doesn’t just concern quality, but also the overall cost, which is intrinsically connected to efficient production techniques. This means product design is increasingly linked to the overall vision of the production process.

**How were these principles applied?**

**AC:** ACX introduces several innovative features. Extensive design research resulted in new solutions that could be applied to every key component, starting with the mechanical unit, which was significantly reduced in size. We even managed to partially conceal the mechanism within the seat base, achieving a slimmer and more lightweight appearance. Yet despite being more compact, the new mechanical unit is so technologically sophisticated that it instantly adapts to the user.

**And what was the goal in the design process in terms of aesthetics?**

**AC:** The idea was to have an understated chair, with a reduced backrest and a warm array of upholstery colours, suited for both home offices and open-plan workspaces. Moreover, the unique slim backrest design has been obtained by associating an open frame structure with a solid upper shell, generating a compact appearance while still offering ample ergonomic comfort.

**ACX has a new ‘automatic system’. Does that affect how it can be used in the office?**

**AC:** ACX can be used as a personal task chair, but it cannot actually be described as one. It is instead an ‘adaptive’ chair that allows flexible seating: the user no longer has to adjust the components to their own preferences, as the mechanism automatically adapts to the user’s weight - but the adjustment options are still provided, of course. This means they can sit down to work at any workstation in an open-plan office and enjoy instant comfort, only needing to modify the seat height, if necessary.

**Was sustainability on your mind while designing the new task chair?**

**AC:** The design process for ACX was guided by the decision to use recycled materials. When you use a recycled material, the design needs to adapt to its inherent characteristics, while the overall production process has to take the physical and mechanical qualities of the material into account. The structural elements in ACX are made of up to approximately 60 % recycled materials, depending on the model.

**How did the product lifecycle influence the development and design?**

**AC:** The use of up to 100% recyclable material was the single most important factor in the design process. Nowadays you design with the product’s end of life in mind, trying to figure out how it can be easily dismantled and recycled to reduce waste.

**What challenges did you face to make the chair up to 100% recyclable?**

**AC:** The main challenge was the idea of developing a chair that can be dismantled and separated into individual materials: studying joints and connections between the various components with a view to ensuring





they are simple to disassemble for responsible waste disposal at the end of the product's life.

**Where else did the recyclability and sustainability play a role in your design?**

**AC:** The 3D knit fabrics are made of 100% recycled polyester and are the result of an elaborate development phase. The backrest covers are form-fitted and entirely without seams, and their revolutionary design means that no material is wasted during production and the cover can be easily replaced if necessary, which further enhances the chair's sustainability.

**As an architect, which needs and trends do you see in the office spaces you design today?**

**AC:** In recent years I have witnessed the introduction of nature in the work environment, the evolution of lighting design towards great attention to daylight, but, more importantly, I see the office environment becoming more and more collaborative, more relaxed, less hierarchical, with the emergence of more informal, flexible, multi-purpose meeting spaces and 'disruptive' elements derived from residential ambiances.

# Recycle

Up to 100% recyclable,  
and consists of around  
60% recycled materials.



# Recycle

ACX is up to 100% recyclable and consists of as much as around 60% recycled materials depending on the model.



# Certificates

To offer transparency with regard to a product's most important environmental factors, Vitra provides certificates from external testing institutes. For this purpose, Vitra focuses on a selection of certificates that explicitly cover key elements of the respective product. (Planned certifications)

## GS

With the GS seal for tested safety, a state-authorised inspection institute certifies the suitability and safety of the construction and monitors production at regular intervals.



## Ergonomics Approved

The 'Ergonomics Approved' certificate confirms the fulfilment of ergonomic requirements and testing criteria that exceed the minimum legal regulations for office swivel chairs.



## BIFMA

ACX fulfils the ANSI/BIFMA standard X5.1-2011, thus meeting the stringent safety requirements for the US market.

**BIFMA**

## Greenguard Gold

The GREENGUARD label for indoor air quality recognises products that contribute to the creation of healthier indoor environments.



## EPD

An EPD – environmental product declaration – provides transparency about the environmental impacts of a product throughout its life cycle, often referred to as life cycle assessment (LCA).



## FEMB Level

Level certification assesses the environmental performance of a product and is structured according to four areas of impact: materials, energy and atmosphere, management of chemicals, and social responsibility.



# Longevity

ACX consists of up to 60% recycled materials depending on the model. These are of at least the same high quality as comparable primary materials and therefore just as durable. Stringent endurance tests are conducted in Vitra's own Test Center to simulate a service life of 15 years.

# Care and maintenance

A design geared towards simplified care and maintenance ensures long-term use. The following link contains [care instructions](#) for the regular upkeep of your product. In addition, Vitra's service staff offers professional cleaning of the seat and backrest upholstery. For this and other cleaning and maintenance needs, get in touch with our team via this [contact form](#).

# Repair and spare parts

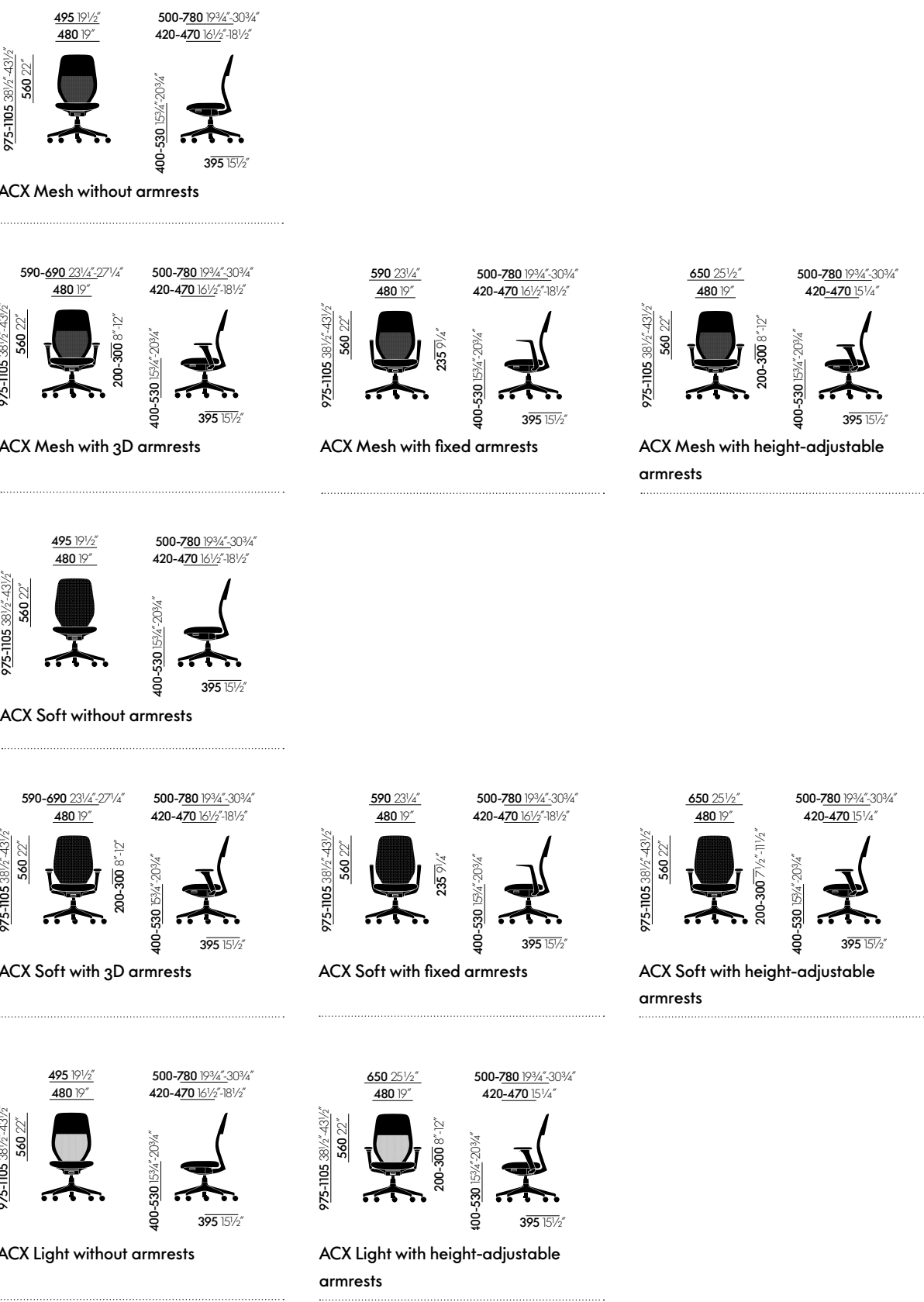
The structural design of ACX is such that components can be easily dismantled repaired and replaced as needed. Castors and glides can be ordered from Vitra's online shop and are delivered with mounting instructions – to the [online shop](#). For service and repair enquiries, please get in touch with Vitra's service team using this [contact form](#).



# Up to 100% recyclable

Depending on the configuration, ACX is up to 100% recyclable. The parts and materials can be separated by type at the end of the product's service life.

# Dimensions





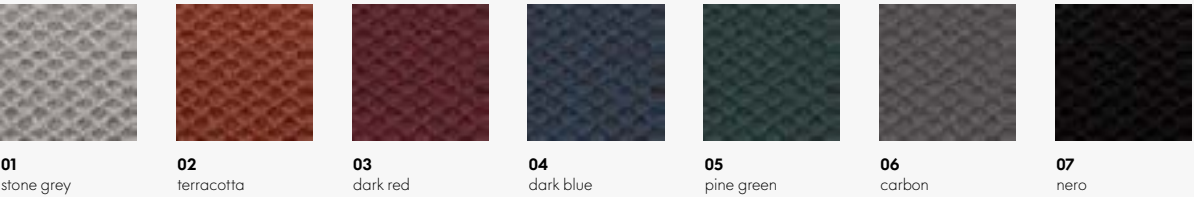
# Cover materials



## Knitted Mesh

The backrest of ACX Mesh has a knitted fabric cover made of recycled polyester with a semi-transparent mesh appearance, which ensures ergonomic support and optimum air circulation.

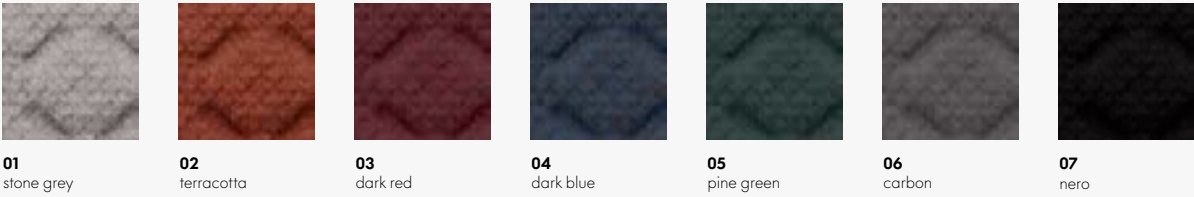
Material	100% recycled polyester	Fastness to light	Type 6
		Pilling	Grade 4-5
Abrasion resistance	40,000 Martindale	Fastness to rubbing	Grade 4-5 dry and wet



## Quilted Knit

The backrest of ACX Soft comes with a padded knitted fabric cover made of recycled polyester, which not only offers exceptional comfort but also gives the chair a relaxed, inviting appearance.

Material	100% recycled polyester	Fastness to light	Type 6
		Pilling	Grade 4-5
Abrasion resistance	40,000 Martindale	Fastness to rubbing	Grade 4-5 dry and wet



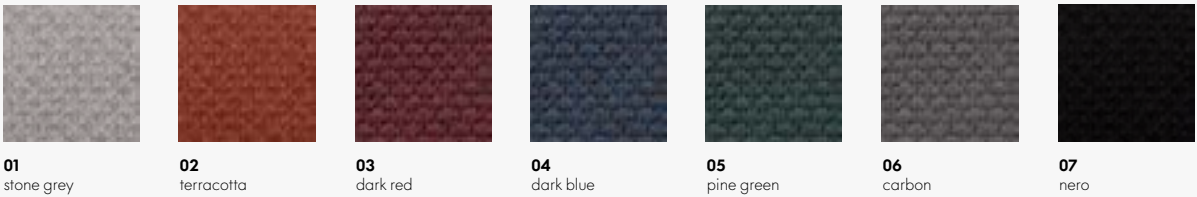
# Cover materials



### Grid Knit

Grid Knit is a form-fitted knit fabric made of recycled polyester, designed as a seat cover for ACX. With its calm, even surface, Grid Knit can be perfectly combined with either Knitted Mesh or Quilted Knit, the two knit fabrics developed for the backrests.

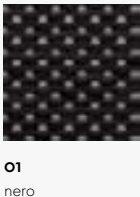
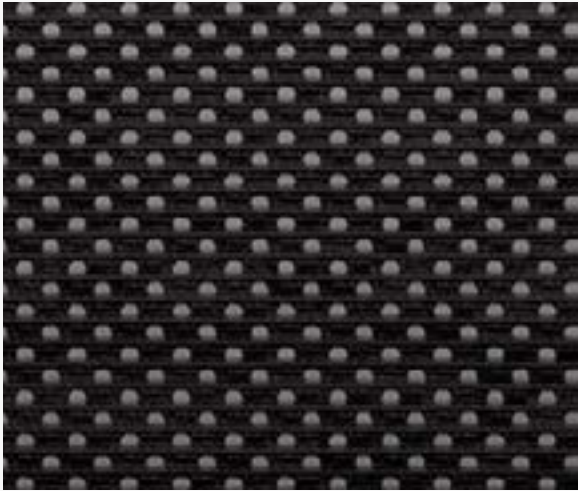
Material	100% recycled polyester	Fastness to light	Type 6
		Pilling	Grade 4-5
Abrasion resistance	40,000 Martindale	Fastness to rubbing	Grade 4-5 dry and wet



### X-Net

Specially developed for Vitra, X-Net is self-supporting, robust and durable despite its transparent, lightweight structure. The knitted textile is used for the backrest of ACX Light.

Material	100% polyester	Fastness to light	Type 6
Weight	405 g/m <sup>2</sup> (11.9 oz/y <sup>2</sup> )	Pilling	Grade 4-5
Abrasion resistance	40,000 Martindale	Fastness to rubbing	Grade 4-5 dry and wet





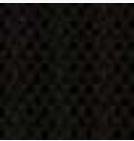
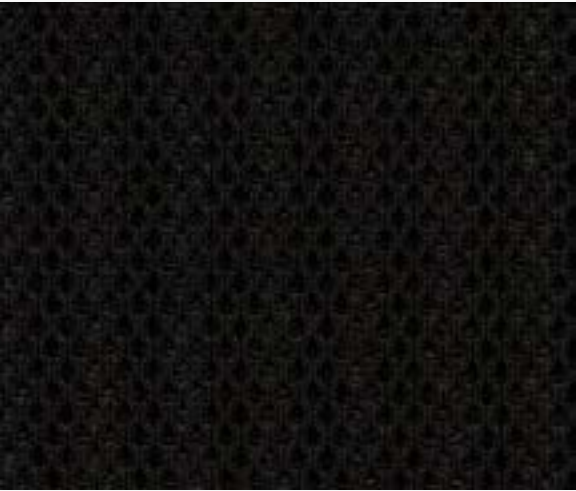
# Cover materials



### Silk Mesh

Silk Mesh is a three-dimensional spacer fabric. Thanks to the air cells in the regular honey-comb structure, the fabric not only provides a comfortable cushioning effect but also ensures a pleasant seating climate. Silk Mesh is extremely robust and well suited for use in office environments.

Material	33% polyamide, 67% polyester	Fastness to light	Type 6
Weight	300 g/m <sup>2</sup> (8.8 oz/y <sup>2</sup> )		
Width	170 cm +/- 3 cm (67")	Pilling	Grade 4-5
Abrasion resistance	100,000 Martindale	Fastness to rubbing	Grade 4-5 dry and wet



66  
nero



<b>Plano (Seat ACX Mesh, ACX Soft)</b>	Material	100% polyester
Plano is a robust plain weave with a flat, even texture. The wide palette of duotones with new, delicate washed-out shades includes many relatively neutral hues, a good number of which are coordinated with the Hopsak colour range. Thanks to its durability and longevity, Plano is also an ideal choice for office furnishings.	Weight	265 g/m <sup>2</sup> (7.8 oz/y <sup>2</sup> )
	Width	142 cm +/- 2 cm (56")
	Abrasion resistance	80,000 Martindale
	Fastness to light	Type 6
	Pilling	Grade 4-5
	Fastness to rubbing	Grade 4-5 dry and wet

<b>05</b> cream white/ sierra grey	<b>39</b> yellow/pastel green	<b>87</b> nero/cream white	<b>03</b> parchment/ cream white	<b>15</b> pink/sierra grey	<b>98</b> dark red/nero
<b>18</b> light grey/sierra grey	<b>68</b> avocado	<b>17</b> forest/sierra grey	<b>20</b> tobacco/cream white	<b>84</b> poppy red/ champagne	<b>54</b> brown
<b>12</b> light grey/ice blue	<b>34</b> grass green/ forest	<b>40</b> coconut/forest	<b>99</b> cognac/parch- ment	<b>72</b> poppy red	<b>75</b> marron/nero
<b>13</b> nero/ice blue	<b>61</b> classic green/ cognac	<b>19</b> sierra grey	<b>80</b> coffee	<b>07</b> orange	<b>73</b> nero/coconut
<b>81</b> blue/coconut	<b>41</b> classic green/ forest	<b>74</b> sierra grey/nero	<b>97</b> red/coconut	<b>63</b> red/poppy red	<b>66</b> nero
<b>86</b> dark blue/brown	<b>52</b> mint/forest	<b>69</b> dark grey	<b>67</b> cognac	<b>96</b> red/cognac	
<b>43</b> petrol/nero		<b>62</b> dark grey/nero	<b>11</b> marron/cognac	<b>16</b> dark red/ice blue	