# WHEELAHR® Be cool, stay cool





## COOL, COMFORTABLE AND IN CONTROL

wheelAIR is the first cooling backrest cushion designed for manual wheelchairs, offering both cooling and extra support.

Patent pending technology based on **convective and evaporative heat loss** allows you to regulate your **core body temperature** through a combination of **moisture wicking fabrics** and guided airflow.

**Non-intrusive, adjustable and silent airflow** guides the heat and moisture away from your body, leaving you **cool and refreshed**.

Carefully selected **antibacterial coated fabrics and foams** enhance your back support, instantly improving posture and comfort.

#### SCIENCE AND TECHNOLOGY

Clinical studies have long been concerned with overheating experienced by those with Spinal Cord Injuries, Multiple Sclerosis, Cerebral Palsy and other neurological conditions as well as an inability to sweat because of certain medicines. Whether as a result from an autonomic nervous system dysregulation, medication or a worsening of neurological symptoms, the methods currently used to cool are similarly intrusive and impractical. Ice packs are used for conductive cooling or water sprays for evaporative cooling, but what about convection heat loss?

Through thermography we identified backrests' heat generating zones, so we could bring convection air cooling to where it is needed most. And even better, by wicking away the natural moisture created from the seated position and combining it with airflow, evaporative cooling occurs too.

But regardless of condition, activity or rising temperature, everyone in a seated position for a prolonged period of time will experience a build-up of heat and moisture between the back and back-rest.



#### **POWERFUL COOLING**

Our radial fan technology can be set to **four levels of intensity** to suit your needs. Radial means that instead of blasting air straight onto the back, **ambient air** is guided from our meticulously designed **fan box** through the **channels**, and evenly dispersed on your back through the unique **3-D spacetec**<sup>®</sup> **fabric**.

The **channels** are made to ensure body weight cannot compress the airflow, and positioned where the back becomes the warmest.

**3-Dimensional spacetec**<sup>®</sup> is a high performance multifunctional spacer textile solution with built-in airflow, moisture transfer and compression recovery. The fabric is **antibacterial coated**, increasing levels of comfort and hygiene.

The entry of the channels are covered by a sustainable **Faux Leather** specifically designed for the healthcare market. It reduces too direct airflow on the sensitive lower back and increases hygiene and style.





#### ENHANCED LATERAL SUPPORT

A carefully selected **blend of viscoelastic foams** makes the wheelAIR backrest far more **comfortable and supportive** than a standard canvas backrest cushion.

The foam reacts to body temperature, moulding exactly around the shape of your back. You will feel an immediate change in posture, feeling more secure and supported in your chair without the need for an intrusive structure.

The wheelAIR is retrofitted and is designed to easily replace the backrest of any lightweight (rigid or foldable) wheelchair with a canvas back.

Available in **four sizes**, wheelAIR is made to assist most users. Additional sizes can be made to measure.

#### **SUSTAINABILITY**

All materials used for the wheelAIR have been carefully and **ethically sourced** as well as **thoroughly tested**. This is to make sure you have the most effective product possible.

Through wheelAIR's modular build, all items can be **replaced and recycled** individually. This way we minimise waste and extend its lifespan.

### QUALITY

The **long-lasting battery** has been selected to optimise your independence, lasting a minimum of up to 19 hours.

Equally, the battery is **easily and quickly recharged** at any power source using a **USB charger**.





#### **USER RESPONSE**

#### **Everyday benefits**

When using the wheelAIR during a warm summers day in a park in Glasgow, Sports Coach Jay Anderson told us that it was the first time in 20 years she had been able to sit in the sun without overheating.

Our brand ambassador double Paralympian Michael Kerr has said that the cooling effects of the fan has "transformed his thermal comfort tenfold". Using the wheelAIR has also given him "extra support in his wheelchair not previously experienced".

#### Athletic benefits

The wheelAIR was put to the test in the blistering heat of mid-summer Australia (temperatures reaching 36 degrees centigrade) in January 2018 by **Antony Cotterill during the Australian Tennis Open**. He used it before and after tough training and match days during the two-week tournament.

He reported that the wheelAIR improved his performance 100% of the time.



## **TECHNICAL INFORMATION**

Available widths	290mm, 330mm, 360mm or 400mm (custom sizes available)
Height	740mm
Height when fitted	300mm - 450mm
Weight	1200g – 1310g depending on size
Box dimensions	430 x 425 x 90 mm
Max user weight	130kg
User care	Machine washable
Battery	Lithium-ion battery
Battery life	10 – 24 hours depending on setting
Charging	Micro USB - provided with purchase
Charging time	Overnight, depending on battery level when charging
Safety	Transit approved / Battery heat safety mechanism
Certification	CE marked
After care	Each part can be replaced individually
Warranty	One year warranty

eLAIR