

WheelAir Systems



Cool, Comfortable, in Control

Our vision is to create a world where every wheelchair user feels comfortable and in control of their temperature and skin microclimate.

With years of product design experience, clinical partnerships, and input from wheelchair users, the **WheelAir** team understands how to tackle problems caused by heat, sweat, and moisture.

WheelAir is the first temperature, humidity, and moisture control system designed specifically for, and to fit all, wheelchairs. By dispersing air evenly across your back or seat using the patented channel technology, it helps avoid issues caused by overheating and (over) sweating while keeping skin dry and clean.

Why WheelAir?

Overheating

Take control of body temperature.

Whether as a result of medication, autonomous nervous system dysregulation, or a worsening of neurological symptoms, cooling yourself down when you are unable to sweat sufficiently can be a challenge.

Once the overheating process has started, it will take much longer to cool back down, which is why we focus on preventing it altogether.

Problem:

- Increased risk of developing heat exhaustion or heatstroke
- Muscle spasms, cramps, heat-induced seizures and nausea

Over-Sweating

Sweating too much can be mentally distressing and have an impact on the skin tissue with symptoms such as red marks on the skin, rashes, and the possibility of developing moisture associated skin damage.

Problem:

- A need to change clothing multiple times per day
- · Skin macerates and becomes vulnerable: risk of moisture lesions and skin ulcers
- Difficulty finding the right seating solution

Microclimate Control

Manage skin temperature and relative humidity.

For individuals struggling with overheating or over-sweating, managing skin microclimate can be a challenge. Research indicates that the ideal skin temperature is 32°C; however, when sitting against a standard seat, the skin temperature rises 2.2°C on average within 30 minutes.

Problem:

 Temperature and moisture are factors known to affect the physiological resilience of skin and underlying tissue





Mcare

Complex | Custom Scripted

A modular solution for all seating needs.

The field of seating and positioning often requires medical practitioners to find creative solutions to complex cases. The WAcare line provides a fully customisable solution in partnership with seating manufacturers. As a modular system, the clinician or technician can select the desired components and place the Fluid FlowTM channels wherever airflow, temperature, or humidity control is most needed.

With a **WAcare** integration as part of the seating system, the client regains full control of the internal and seat surface temperature and humidity, often replacing desk fans and towels. The optimal thermal comfort assists in maintaining skin integrity by reducing the risk of heat and moisture associated skin damage.

Due to the modularity there are really no limits as to how and where the products can be integrated. The request for a **WAcare** integration can be made by the medical practitioner with one of our recognised partners, with whom we work closely together to integrate as desired. Please contact us or one of our recognised partners to discuss possibilities near you.



Features:

- Modular system
- Integrates in all seating systems
- 6 airflow settings
- Silent airflow
- Fluid Flow[™] channel technology
- Up to 27 hours battery life

Product	WA System
Description	An integrated modular solution in partnership with our Recognised Partners available in all types of seating systems, such as power chairs and custom seating solutions.
User Profile	Struggles with temperature regulation, sweat and/or humidity control
Location	Seat, backrest, sleeping systems
Channel Positioning	Fully customisable
Wheelchair Fit	All
Temperature Control	0 0 0 0
Sweat Control	0 0 0 0
Humidity Control	0 0 0 0
Airflow Sensation	0 0 0
Customisation	0 0 0 0
Quick Installation	0 0





Mgo | Cushion Cover

Standard Sizing



Removing the existing cushion cover and placing the cushion inside the WheelAir cover instantly promotes even airflow distribution throughout the cushion, lowering relative humidity, and significantly decreasing the speed at which the temperature rises. Temperature and humidity control are two defining factors in maintaining skin integrity by reducing the risk of heat and moisture associated skin damage and by keeping skin dry and clean.

The WheelAir Cushion Cover was tested with several cushion types to research performance. Naturally, the more permeable the cushion, the better the results, but even with dense foam cushions the results were still astounding. We do want to note that with a non-permeable cushion or incontinence cover there will be no effect.

The WheelAir Cushion Cover can be used in every wheelchair with a removable cushion, given that there is an opening and space in the back for the Fanbox to hang.



Features:

- 6 airflow settings
- Silent airflow
- Fluid Flow[™] channel technology
- Anti-Slip cover base
- Up to 27 hours battery life
- Available in 12 sizes

Product	WA Cushion Cover
Description	A ready-to-go cover transforming any cushion into a microclimate cushion for optimal temperature and humidity control of the seat surface
User Profile	Prone to skin damage at the seat surface
Location	Seat cushion
Channel Positioning	Underneath cushion
Wheelchair Fit	All, requires breathable cushion
Temperature Control	0 0 0
Sweat Control	0 0
Humidity Control	0 0 0 0
Airflow Sensation	0 0
Customisation	0
Quick Installation	0 0 0 0





Standard Sizing

The WheelAir Slingback is a seating system created to be your ultimate tool for temperature and sweat control.

Equipped with the WheelAir airflow system and FluidFlowTM channel technology to control and stimulate ventilation across the backrest, the WheelAir Slingback is designed to instantly improve comfort.

Due to the **Fluid Flow**[™] channel technology sitting in close proximity to the skin, the Slingback is designed to help regulate body temperature and improve thermal comfort, giving back control over daily heat generating activities and internal heat build-up, all while promoting comfort and healthy skin.

The WheelAir Slingback can be used with all types of wheelchairs that have velcro straps at the back, whether it is a rigid, folding or light powerchair. The product also works in conjunction with tapered or contoured backrests such as the ILSA backrest. If you have a hard shell backrest please refer to our product partnerships to see whether we collaborate with your chosen brand.



Features:

- 6 airflow settings
- Silent airflow
- Fluid Flow[™] channel technology
- Anti-Slip cover base
- Up to 27 hours battery life
- Available in 12 sizes

Product	WA Slingback
Description	A ready-to-go back support for wheelchairs with velcro straps at the back offering full temperature control for the active user.
User Profile	Struggles with temperature regulation
Location	Backrest support
Channel Positioning	At seat surface
Wheelchair Fit	Wheelchairs with velcro straps
Temperature Control	0 0 0 0
Sweat Control	0 0 0 0
Humidity Control	0 0 0 0
Airflow Sensation	0 0 0 0
Customisation	0 0
Quick Installation	0 0 0 0





Mgo | Slingback

Test Results

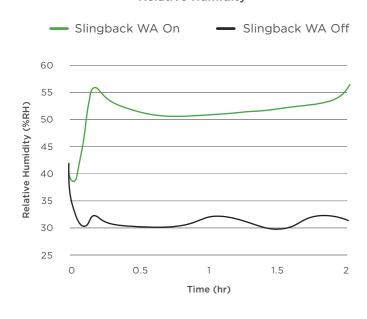
The results show that it took less than an hour for the **Slingback** to cool the contact area by 4°C. This is compared to a 6.6°C rise when the fanbox is turned off. The results also indicate that, over a two hour test period, the **WA Slingback** keeps the back contact area up to 9.2°C cooler when the fanbox is on, compared to when it is off.

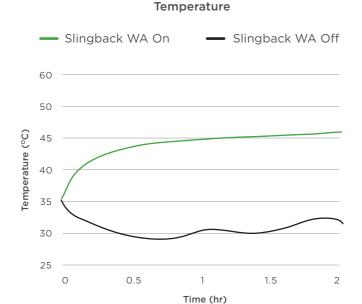
In terms of humidity, the Slingback reduced the relative humidity levels at the contact area by 25.2% when the Fanbox was on, compared to when it was off. This is a considerable difference, which was sustained throughout almost the entire two hour test period.

Relative Humidity: 34.1% (+/- 4.8%)

Room Temperature: 25.5°C (+/- 0.75°C)

Relative Humidity





Warranty & Technical Information

Slingback Sizes Width ranging from 29cm to 44cm, length in 73cm or 84cm

Textile Covers Machine Washable (see care label)

Cushion Cover Sizes

Ranging from 40x40cm to 50x50cm in length and depth, and 6cm or 10cm in height

Tension Adjustable Straps

One size fits a

Lumbar Support Width ranging from 29cm to 44cm

User Care

Fanbox Size 26.5cm/10.5cm/3.9cm

tery 3.7V 8000mAh Lithium-Ion

Battery Life 27 hours (lowest setting)

CE Marked

tery Life 27 flours (lowest s

Charger 18W USB-C

Charge Time 2 hours to 80%

Airflow 9m/s - 28m/s output m/s=meters per second

Fan Lifespan 70,000 hours

Safety

Transit Approved and tested to IEC60601

Certification

Aftercare

Each Part can be Replaced Individually

Mcare

If you have a custom seating system on your wheelchair or other specific needs that require a WheelAir System fitted to your chair, then please request a demonstration through your OT. One of our complex rehab representatives will work with you and give necessary expert advice on finding the right fit.

Mgo

WAgo is our "off-the-shelf" product line, meaning they can be delivered to you to use right away. The WAgo products seamlessly integrate with wheelchairs with tension adjustable straps and removable cushions, meaning that you can fit them yourself without the need of expert help.



WheelAir

