



# 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

#### WheelAir







- Modular system
- Integrates in all seating systems
- 6 airflow settings
- Silent airflow
- Fluid Flow<sup>™</sup> channel technology
- Up to 27 hours battery life

Product WA System   Description An integrated modular solution in partner available in all types of seating systems, si seating solutions.   User Profile Struggles with temperature regulation, sw   Location Seat, backrest, sleeping systems   Channel Positioning Fully customisable   Wheelchair Fit All   Temperature Control 0 0   Sweat Control 0 0   Airflow Sensation 0 0   Quick Installation 0 0		
Description       available in all types of seating systems, siseating solutions.         User Profile       Struggles with temperature regulation, sw         Location       Seat, backrest, sleeping systems         Channel Positioning       Fully customisable         Wheelchair Fit       All         Temperature Control       0       0       0         Sweat Control       0       0       0         Airflow Sensation       0       0       0         Customisation       0       0       0	Product	WA System
Location       Seat, backrest, sleeping systems         Channel Positioning       Fully customisable         Wheelchair Fit       All         Temperature Control       0       0       0         Sweat Control       0       0       0         Airflow Sensation       0       0       0         Customisation       0       0       0	Description	available in all types of seating systems, s
Channel Positioning       Fully customisable         Wheelchair Fit       All         Temperature Control       0       0       0         Sweat Control       0       0       0       0         Humidity Control       0       0       0       0         Airflow Sensation       0       0       0       0         Output       0       0       0       0	User Profile	Struggles with temperature regulation, sw
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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       0       0	Channel Positioning	Fully customisable
Sweat Control0000Humidity Control0000Airflow Sensation000Customisation000	Wheelchair Fit	All
Humidity Control     0     0     0       Airflow Sensation     0     0     0       Customisation     0     0     0	Temperature Control	0 0 0 0
Airflow Sensation 0 0 0 Customisation 0 0 0 0	Sweat Control	0 0 0 0
Customisation 0 0 0 0	Humidity Control	0 0 0 0
	Airflow Sensation	0 0 0
Quick Installation 0 0	Customisation	0 0 0 0
	Quick Installation	0 0



# 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 Flow™** 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.

#### 4 WheelAir

ership with our Recognised Partners such as power chairs and custom

weat and/or humidity control



# Mgo | Cushion Cover

Standard Sizing

The WheelAir Cushion Cover provides the microclimate, humidity, and temperature control benefits of the WheelAir system while keeping the pressure relieving, shear force qualities, and comfort of the existing seat cushion.

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<sup>™</sup> 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 cu for optimal temperature and humidity co
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





cushion into a microclimate cushion control of the seat surface

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# Mgo | Slingback

**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 FluidFlow<sup>™</sup> channel technology to control and stimulate ventilation across the backrest, the WheelAir Slingback is designed to instantly improve comfort.

Due to the **Fluid Flow**<sup>™</sup> 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<sup>™</sup> 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 wheelch offering full temperature control for the a
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

hairs with velcro straps at the back active user.





## 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)





Temperature

## Warranty & Technical Information

Slingback Sizes	Width ranging from 29cm to 4
Cushion Cover Sizes	Ranging from 40x40cm to 50
Tension Adjustable Straps	One size fits all
Lumbar Support	Width ranging from 29cm to 4
Fanbox Size	26.5cm/10.5cm/3.9cm
User Care	Textile Covers Machine Washab
Battery	3.7V 8000mAh Lithium-Ion
Battery Life	27 hours (lowest setting)
Charger	18W USB-C
Charge Time	2 hours to 80%
Airflow	9m/s - 28m/s output m/s=m
Fan Lifespan	70,000 hours
Safety	Transit Approved and tested to
Certification	CE Marked
Aftercare	Each Part can be Replaced Ind

Wcare

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.

WheelAir 10

44cm, length in 73cm or 84cm

0x50cm in length and depth, and 6cm or 10cm in height

4cm

ble (see care label)

neters per second

o IEC60601

dividually

**W**go

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



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