

# VICAIR<sup>®</sup>

CATALOGUE 2019-2020

Additional  
cushions added to  
**Vicair 02**  
range



relief by air

OFFICIALLY AVAILABLE THROUGH INVACARE





## Lifetime warranty is a unique Vicair service that applies to the latest generation of Vicair SmartCells.

We stand for the quality of these cells and therefore will always replace them in case some of them unexpectedly do not last a lifetime. Vicair Lifetime Warranty is an off-the-shelf service, no registration necessary. You can recognize the latest generation SmartCells by their black Vicair logo-print.

relief by air

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# VICAIR TECHNOLOGY



**The best medium for pressure redistribution is air. Unfortunately, there are a few drawbacks; air is unstable and it tends to leak. Vicair solved these issues when they created Vicair SmartCells.**

The unique Vicair air-technology, which uses the small air-filled SmartCells, was developed in cooperation with the Amsterdam Rehabilitation Centre. It was awarded the Grand Prix at the 'Salon des Inventions' in Geneva, Switzerland. Vicair develops and produces its product line in the Netherlands for customers all over the world.

## **Lifetime Warranty**

*The latest generation Vicair SmartCells - printed with the black logo - come with lifetime warranty.*

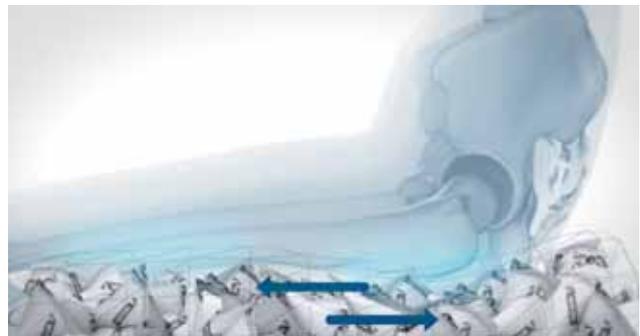
## **Unique combination of skin protection and positioning**

When you sit on a Vicair wheelchair cushion, you are supported by hundreds of SmartCells. The layers of cells inside the cushion compartments move with so little friction that the effect resembles the behaviour of a viscous fluid, slowly adjusting to the shape of your body. Also, because SmartCells deform individually, they conform to your body's contours. The result is superior pressure redistribution.



On top of this, the design of the cushion compartments combined with the specific number of cells in them make the Vicair wheelchair cushion ultra stable and help prevent the

person sitting on it from sliding forward. As a result the cushion reduces shear forces to a bare minimum and helps to create and maintain an optimal, functional posture.



## **Ready for use**

*The Vicair cushion is ready for use straight out of the box.*

## **Ease of use**

Vicair SmartCell cushions are extremely user-friendly. The well balanced filling grade ensures that Vicair cushions are ready to use, but if you prefer, you can adjust the cushions to your personal positioning needs by adding or removing SmartCells.

## **Machine washable**

*You can easily machine wash the new Vicair O2 wheelchair cushions at 60°C.*

The cushion requires hardly any maintenance; there is no need for a pump or any other accessories and once the cushion is set up, it doesn't require daily monitoring. The new Vicair O2 wheelchair cushions can even be easily machine washed at 60°C.

Not only are Vicair wheelchair cushions extremely comfortable, but they are incredibly lightweight: on average weighing less than 0,8 kg each. This makes them the lightest high performance wheelchair cushions available by far.

# AVAILABLE COVERS

# CUSHION SIZE

A cushion cover has influence on the overall performance of a wheelchair cushion. Therefore Vicair covers are made of high quality materials that enhance the performance of Vicair cushions, ensuring that you will experience maximum protection and comfort.

## Vicair O2 Top Cover

Especially designed for the Vicair O2 cushion range (excluding Pommel cushion O2). This cover – similar to a cap – has a breathable outer layer and covers only the top part of the cushion. Leaving the bottom part open, allowing the cushion to continue to breathe and offering optimal ventilation and comfort. The cover is ideal to help manage one of the main causes of pressure sores.

## Comfair Cover

This breathable cover is made out of multi-dimensional stretch material, reducing pressure on bony prominences. The breathable fabric is designed for air transmission and heat dissipation.

## Incotec Cover

A high quality fluid resistant cover made out of elastic material. Extremely usable in all situations (institutional and home use) where incontinence and hygiene is an issue.

## GENERAL TECHNICAL SPECIFICATIONS

Used materials	Latex free
Machine washable	60°C

It's not only the unique technique of Vicair cushions that provides an optimal seating position. Setting up the wheelchair properly is extremely important.

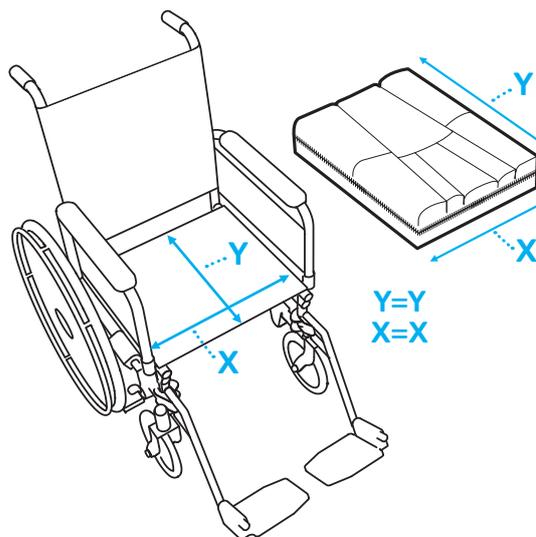
Think of the adjustment of the foot plate, correct seating angle, right backrest height, but also the seat to floor height.

To get the correct size of wheelchair cushion, Vicair recommends to measure as follows:

The width (X) of the cushion and the wheelchair seat should match. When the cushion rests against armrests or side-guards, the width of a Vicair seat cushion may be up to 2,5 cm (1") wider.\* The depth (Y) of the cushion and seat should match.

When ordering a Vicair cushion, first mention the width (X) of the cushion and then the depth (Y).

\* Exception: The width of the Vicair Active O2 should always match the width of the wheelchair seat.





# VICAIR<sup>®</sup>

# 02

Vicair O2 cushions tackle the hygiene issues caused by incontinence. The open structure of the Vicair O2 range allows the cushions to be easily washed in any washing machine. Without the need for a laundry bag, and without removing the SmartCells. These cushions are ideal for both institutional and home use, in situations where incontinence, temperature and humidity is an issue.



**100% MACHINE WASHABLE**  
The cushion is, with the SmartCells inside, fully machine washable at 60°C.



**100% BREATHABLE**  
The open structure of the cushion provides optimal temperature and moisture regulation.



**SOLID SHAPE**  
This new cushion model keeps its shape, enhancing the individual's skin protection.



**WIDE RANGE**  
Available in two heights and offering 145 standard sizes on selected models. Custom sizes available on request.

## Highest level of skin protection

## Exceptional stability & positioning

## Easy to maintain; no inflation necessary

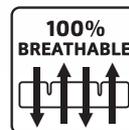
THE OPTIMAL CUSHION FOR INDIVIDUALS WITH BODY ASYMMETRY

Pre-ischial bar limits sliding forward | converts shear into normal forces

Follows the body's contours for equal pressure distribution | support IT-coccyx area | managing pelvic asymmetry

Thigh support

Mid height zip closure for easy adjustment when client is seated | cushion keeps its shape, enhancing the individual's skin protection



Individual solution for asymmetry

Minimises sliding and shear forces

Optimal adjustment to the body's contours for equal pressure distribution

The Adjuster O2 is extremely suitable for use with asymmetric body contours and amputations. It automatically manages small obliquities and is individually adjustable to support more extreme asymmetry. The Adjuster O2 offers a high comfort level, optimal skin protection and stability. The design allows total immersion to equally redistribute pressure and prevents sliding forward. 100% machine washable and breathable, for optimal hygiene and perfect temperature and moisture regulation. As a result the Adjuster O2 offers the optimal protection against skin breakdown.

PRODUCT PERFORMANCE

Skin protection / Anti decubitus	▲▲▲▲▲
Pressure redistribution	▲▲▲▲▲
Shear reduction	▲▲▲▲▲
Microclimate control	▲▲▲▲▲
Impact & vibration damping	▲▲▲▲▲

Positioning

Lateral stability	▲▲▲▲▲△
Frontal stability	▲▲▲▲▲
Sliding prevention	▲▲▲▲▲
Allows manual adjustments	▲▲▲▲▲
Allows easy transfers	▲▲▲▲▲△

Maintenance & Safety

Durability	▲▲▲▲▲
Reliability	▲▲▲▲▲
Functionality when misused	▲▲▲▲▲△
Low maintenance level	▲▲▲▲▲
Level of hygiene	▲▲▲▲▲

Functionality & Application

Comfort	▲▲▲▲▲
Low cushion weight	▲▲▲▲▲
Available size range	▲▲▲▲▲
Maximum user weight	▲▲▲▲▲
Low seat to floor height	▲▲▲▲▲
Auto adjustments	▲▲▲▲▲△

USED WITH

Hemiplegia (CVA), amputations, foot propulsion, kyphosis, pelvic obliquity/tilt/rotation, Spina Bifida, spasms, Fibrodysplasia Ossificans Progressiva (FOP)

TECHNICAL SPECIFICATIONS

Height	6 and 10 cm
Average weight	725 grams
Max. user weight	250 kg
Machine washable	60°C max.

CUSHION SIZES

Standard (Sizes >53 cm height 10 only)  
On request

Inch	width										
	14	15	16	17	18	19	20	21	22	23	24
CM	35	38	40	43	45	48	50	53	55	58	60
14	35										
15	38										
16	40										
17	43										
18	45										
19	48										
20	50										
21	53										
22	55										
23	58										
24	60										

FOR ENHANCED STABILITY IN THE WHEELCHAIR

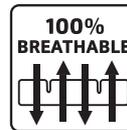
**Ischial well - Two compartments**  
for superior pressure reduction in the IT-coccyx area & extra positioning possibilities

**Trochanter support**  
firmer density to provide lateral stability | redistributes pressure to help create an ischial well



**Front compartments** provide leg alignment and stability | easily adjustable for individual positioning needs

**Mid height zip closure** for easy adjustment when client is seated | cushion keeps its shape, enhancing the individual's skin protection



**Nine adjustable compartments for optimal stability**

**Expanding the individual's reach**

**Extra positioning of the thighs**

Sometimes it is necessary to reduce pressure in the vulnerable area around the IT's (sitting bones) and coccyx (tailbone). The Vector 02 does just that. Its unique compartment layout further provides extra pelvic stability, excellent leg guidance, optimal skin protection and comfort.

100% machine washable and breathable, for optimal hygiene and perfect temperature and moisture regulation. The Vector 02 offers support where needed, resulting in improved functionality of the upper body and expanding reach.

**PRODUCT PERFORMANCE**

Skin protection / Anti decubitus	▲▲▲▲▲
Pressure redistribution	▲▲▲▲▲
Shear reduction	▲▲▲▲△
Microclimate control	▲▲▲▲▲
Impact & vibration damping	▲▲▲▲▲

**Positioning**

Lateral stability	▲▲▲▲▲
Frontal stability	▲▲▲▲▲
Sliding prevention	▲▲▲▲▲
Allows manual adjustments	▲▲▲▲▲
Allows easy transfers	▲▲▲▲△

**Maintenance & Safety**

Durability	▲▲▲▲▲
Reliability	▲▲▲▲▲
Functionality when misused	▲▲▲▲△
Low maintenance level	▲▲▲▲▲
Level of hygiene	▲▲▲▲▲

**Functionality & Application**

Comfort	▲▲▲▲▲
Low cushion weight	▲▲▲▲▲
Available size range	▲▲▲▲▲
Maximum user weight	▲▲▲▲▲
Low seat to floor height	▲▲▲▲▲
Auto adjustments	▲▲▲▲△

**USED WITH**

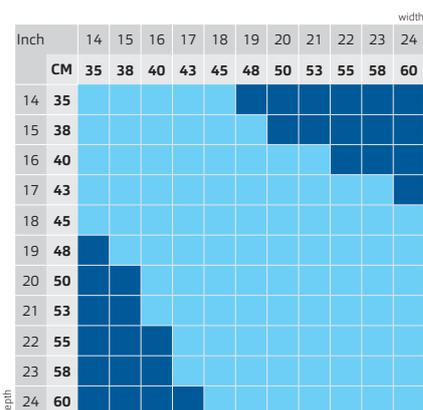
Spinal cord injuries, neuromuscular diseases, hypermobility syndrome, Ehlers Danlos Syndrome (EDS)

**TECHNICAL SPECIFICATIONS**

Height	6 and 10 cm
Average weight	725 grams
Max. user weight	250 kg
Machine washable	60°C max.

**CUSHION SIZES**

■ Standard (Sizes >53 cm height 10 only)  
■ On request



# CLINICAL CASE Enhancing positioning and maintaining skin integrity, by using Vicair cushions

## Background

In this study we will be describing a case of a 31 year old female, Miss Y. Miss Y was diagnosed with an anoxic brain injury post anaesthetic which resulted in spastic quadriplegia and severe cognitive impairment. Additionally there is bilateral acetabular dysplasia with complete dislocation.

The anoxic brain injury followed from a cardio respiratory arrest during an eye surgery that Miss Y underwent at an age of 18 months old. Presently she has a high level of tetraplegia and is non-communitive. She requires a wheelchair (tilt-in-space) for mobility and is dependent on full assistance for mobilising, transfers (predominantly made by ceiling track hoist) and all self-cares and daily activities.

Miss Y lives in her own home, just next door to her parents and has two main caretakers who support her in her daily activities. She enjoys getting out in the community in her wheelchair or by driving along in one of the vans of her carers. She enjoys shopping, meeting her mother at work and many other community activities. She loves the spa in her home, enjoys sitting outdoors in the delightful garden and loves being involved in tasks around the home. She enjoys watching television and listening to the recordings of her favourite music and television series.

## The Problem

The problem she faced was that Miss Y's seating no longer met her postural needs and did not support her pelvis, trunk or legs. She was mobilised in planar seating (with no contouring) and the attached flat lateral trunk support were too small and



not positioned correctly.

In detail this meant that a number of things needed to be taken into account when addressing her positioning when lying down, the following was noted:

- Her pelvis has an anterior tilt, obliquity (left 1½" lower) and rotation (right forward). With a T-roll institu the tilt moves to posterior and her obliquity reduces by ¼"
- Her trunk shows significant scoliosis (convex to the left) which has its apex at the lumbar/thoracic junction. There's a rotation through the thoracic spine (left forward) and lumbar lordosis.
- Her left hip is internally rotated and adducted over the midline and her right hip is in external rotation.
- Her left knee has a flexion contracture of approximately 30 degrees.
- There is minimal movement through the joints that enables corrections.

When sitting in a supported seating on a plinth Miss Y had the same postural anomalies as when lying down, though her obliquity was increased to 2½" discrepancy.

An x-ray revealed further details about Miss Y's situation and it was noted that her thoracic alignment is normal apart from mild rotational deformity in the lower thoracic. Her lumbar spine has marked rotoscoliotic deformity, convex left with a Cobb angle of approximately 46 degrees. Her pelvis is distorted with mild subluxation pubic symphysis and bilateral acetabular dysplasia. It also showed that there is complete bilateral dislocation of both hips, with superior displacement of the proximal femora. Furthermore her right leg is internally rotated.

## Actions taken before using Vicair

Modifications to Miss Y's existing seating was considered but deemed not an option because more contouring was required than the seating could sustain. After several trials her wheelchair was set up with the following things to attempt to address the problem at hand:

- A multi-layer contoured foam cushion with additional custom contouring was placed at the pelvis and medial thigh

area to support her pelvic obliquity, dislocated hips and her thigh position.

- A dual foam back support with contouring cube system on a solid shell

was used. The system was custom contoured in the lumbar and thoracic spine area to support her lumbar lordosis and trunk rotation.

- D-shaped, curved lateral trunk supports (medium on right, large of left) off set were used to support her scoliosis.



- A contoured headrest.
- A centre point anterior support harness and a 2 point hip support belt were used. This seating system needed to be reviewed and adjusted every 6 to 12 months and prior to starting the clinical trial it was found that it wasn't supporting her accurately. Limited further contouring was achieved but she was starting to get reddening of her skin over her left ischial tuberosity.

In exploring more options Miss Y attended the local spasticity clinic and had reviews with Orthopaedic Consultants to determine what medical input could assist the management of her dislocated hips and left knee contracture. Surgery, however, is not an option as the family declined any further general anaesthetic due to this being the initial cause of her diagnosis. It was determined that she could perhaps benefit from botox in her left hamstring and alternative seating.

## Implementing Vicair into the seating solution

It was determined that Miss Y required a system that she could immerse into to accommodate and support her rather than the system being moulded to her. Vicair cushions have immersive qualities and it was therefore decided to trial a Vicair Vector of 6cm high with an increased

-- continued on next page --

# CLINICAL CASE Enhancing positioning and maintaining skin integrity, by using Vicair cushions

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*Cycle of adjustment of the seating system pre-Vicair*



amount of Smartcells in the medial thigh support and right rear greater trochanter areas.

It was found that further depth was required, therefore the Vicair Vector of 10 cm high was introduced. It was found to be successful at capturing Miss Y's pelvis and maintaining her skin integrity. Shortly after, the Vicair Vector O2 became available on the market and it was agreed to trial the 10cm high Vicair O2 version as well to see the difference between this and the standard Vicair Vector cushion.

The Vicair Multifunctional back support cushion was also trialled, replacing the foam contouring on the existing back shell. It was set up with an increase in cells in the lower three compartments. It was found that Miss Y now had contact with her entire trunk and therefore gained the support in the lumbar region that she required.

### The Conclusion

Instead of sitting on top of her seating and being pushed forward, Miss Y is immersed into it. Rather than sitting on top of her cushion she is now sitting in it, therefore cradling her dislocated hips and filling all the gaps at her spine to give improved support.

There's no longer a case of reddened areas as aggressively as before on her left ischial tuberosity and when it occurs it is resolved after an evening in bed. With her new seating solution she is also able to mobilise longer in her wheelchair without the same degree of concern for her skin integrity.

The Vicair Vector O2 has also been a welcome change for the standard 10 cm high cushion as it offers the ability to be washed off by machine washing. After food or drink was spilled the Vicair Vector O2 cleaned off easier. Additionally the Vector O2 was easier and faster to dry out if they happened to be out in wet weather. There was one concern raised regarding where the liquid would go if spilled on the cushion, but this was rectified by the use of a Kylie pad tucked in the cover under the cushion.

Due to the success of the Vicair Vector O2 and Multifunctional back in her wheelchair, Miss Y's car seat was stripped back and set up with the same products to give the same support when she is using this chair.



*Erin Davis, Occupational Therapist, Southern Rehab.*

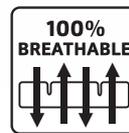
FOR ACTIVE INDIVIDUALS

**Ischial well - Two compartments**  
for superior pressure reduction in the IT-coccyx area & extra positioning possibilities

**Trochanter support**  
firmer density to provide lateral stability | redistributes pressure to help create an ischial well

**Ergonomically-shaped foam**  
for easy transfers

**SmartCell – Foam barrier**  
limits sliding forward



Perfect for people who transfer frequently

Excellent lateral and frontal stability

Features a nifty storage pouch for personal items

The Active O2 offers the unique combination of ergonomically shaped foam and Vicair SmartCells. The four rear SmartCell compartments provide a high level of comfort and skin protection, and reduce pressure on the sitting bones and tailbone area. The foam front makes transfers easy and feels steady and improves wheelchair handling. The foam inlay is protected by an easy-to-clean fluid-resistant liner. The rest of the cushion is 100% machine washable and breathable for optimal hygiene and perfect temperature & moisture regulation. The Active O2 has an easy accessible storage pouch for precious belongings (keys, phone, wallet). In short: everything needed to maintain an active lifestyle!

**PRODUCT PERFORMANCE**

Skin protection / Anti decubitus	▲▲▲▲▲
Pressure redistribution	▲▲▲▲▲
Shear reduction	▲▲▲▲▲
Microclimate control	▲▲▲▲▲
Impact & vibration damping	▲▲▲▲▲

**Positioning**

Lateral stability	▲▲▲▲▲
Frontal stability	▲▲▲▲▲
Sliding prevention	▲▲▲▲▲
Allows manual adjustments	▲▲▲▲▲
Allows easy transfers	▲▲▲▲▲

**Maintenance & Safety**

Durability	▲▲▲▲▲
Reliability	▲▲▲▲▲
Functionality when misused	▲▲▲▲△△
Low maintenance level	▲▲▲▲▲
Level of hygiene	▲▲▲▲▲

**Functionality & Application**

Comfort	▲▲▲▲▲
Low cushion weight	▲▲▲▲▲△
Available size range	▲▲▲▲▲
Maximum user weight	▲▲▲▲▲
Low seat to floor height	▲▲▲▲▲
Auto adjustments	▲▲▲▲▲△

**USED WITH**

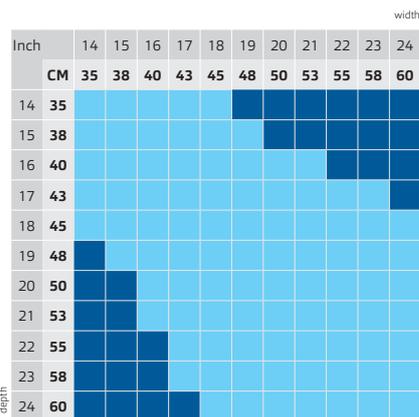
Spinal cord injuries, active users with a high transfer frequency

**TECHNICAL SPECIFICATIONS**

Height	6 and 9 cm
Average weight	1250 grams
Max. user weight	200 kg
Machine washable	60°C (without foam)

**CUSHION SIZES**

- Standard (Sizes >53 cm height 9 only)
- On request



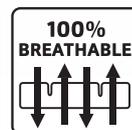


EXPLORE THE POSSIBILITIES

Ergonomically shaped back part for seamless fit to the shape of your lower back

Vicair SmartCells for skin-protection

Easily adjustable straps to provide comfort and to follow the body



Stays with your client during activities

Skin protection

Extremely light to support optimal mobility

Not all activities require or allow the use of a wheelchair. In these situations the Vicair AllRounder O2 keeps your client comfortable and helps to protect their skin. As it is easily buckled onto the body, it will follow your client around wherever they go.

Your client can feel protected and secure during sports and outdoor activities, when sitting in a normal chair or on any hard surface, or when playing on the ground. Afterwards the entire AllRounder O2 can be put in the washing machine then hang it up to dry, ready for the next adventure. Allows your client to experience freedom!

PRODUCT PERFORMANCE

Skin protection / Anti decubitus	▲▲▲▲△
Pressure redistribution	△△△△△
Shear force reduction	△△△△△
Microclimate control	▲▲▲▲▲
Impact & vibration damping	▲▲▲▲△

Positioning	△△△△△
Lateral stability	△△△△△
Frontal stability	△△△△△
Sliding reduction	△△△△△
Allows manual adjustments	△△△△△
Allows easy transfers	△△△△△

Maintenance & Safety	▲▲▲▲△
Durability	▲▲▲▲▲
Reliability	▲▲▲▲▲
Functionality when misused	△△△△△
Low maintenance level	▲▲▲▲△
Level of hygiene	▲▲▲▲▲

Functionality & Application	▲▲▲△△
Comfort	▲▲▲▲▲
Low cushion weight	▲▲▲▲▲
Available size range	▲▲▲▲▲
Maximum user weight	▲▲▲▲▲
Low seat to floor height	▲▲▲▲▲
Auto adjustments	△△△△△

USED WITH

Activities outside of the wheelchair | When seated on hard surfaces for long periods in time.

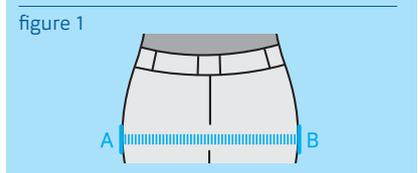
TECHNICAL SPECIFICATIONS

Height	n.a.
Average weight	800 grams
Max. user weight	100 kg
Machine washable	60°C max.

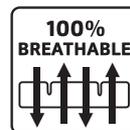
CUSHION SIZE

Small	< 38 cm
Medium	38 – 42,5 cm
Large	43 – 48 cm

**Determining the correct hip width**  
 Measure the width of your hips to check which size matches the size of your body. When seated, hold a tape measure horizontally above the widest point of your upper legs, closely against the front of your hips. Do not follow your leg contours, keep the tape measure straight. Measure from A to B (or B to A). Choose the larger size if the measured size is in between two sizes.



OFFLOADING PRESSURE IN THE HIGH RISK AREA



For completely offloading of the rectal area

Adjustable non-contact area

Stable positioning

The Vicair Centre Relief O2 is the best choice if you need to completely offload the rectum perineum and coccyx area. By simply removing SmartCells from the centre circle compartment you create a non-contact area. This important feature makes a great difference for persons with (for instance) localized deep pressure ulcers, rectum or tailbone problems. Or after perineal surgery. 100% machine washable and breathable, for optimal hygiene and perfect temperature and moisture regulation.

The Vicair Centre Relief O2 helps you to sit comfortably and safe, even in the most painful situations.

PRODUCT PERFORMANCE

Skin protection / Anti decubitus	▲▲▲▲▲
Pressure redistribution	▲▲▲▲▲
Shear force reduction	▲▲▲▲▲
Microclimate control	▲▲▲▲▲
Impact & vibration damping	▲▲▲▲▲

Positioning	▲▲▲▲△
Lateral stability	▲▲▲△△
Frontal stability	▲▲▲△△
Sliding reduction	▲▲▲▲△
Allows manual adjustments	▲▲▲▲▲
Allows easy transfers	▲▲▲▲△

Maintenance & Safety	▲▲▲▲△
Durability	▲▲▲▲▲
Reliability	▲▲▲▲▲
Functionality when misused	▲▲▲△△
Low maintenance level	▲▲▲▲▲
Level of hygiene	▲▲▲▲▲

Functionality & Application	▲▲▲▲△
Comfort	▲▲▲▲▲
Low cushion weight	▲▲▲▲▲
Available size range	▲▲▲△△
Maximum user weight	▲▲▲▲▲
Low seat to floor height	▲▲▲▲▲
Auto adjustments	▲▲▲▲△

USED WITH

Rectum problems, tailbone problems, localized deep pressure ulcers, after perineal surgery or difficult childbirth

TECHNICAL SPECIFICATIONS

Height	10 cm
Average weight	750 grams
Max. user weight	250 kg
Machine washable	60°C max.

CUSHION SIZES

- Standard
- On request

Inch	width										
	14	15	16	17	18	19	20	21	22	23	24
CM	35	38	40	43	45	48	50	53	55	58	60
14	35										
15	38										
16	40										
17	43										
18	45										
19	48										
20	50										
21	53										
22	55										
23	58										
24	60										

PRESSURE RELIEF AND STABILITY WITH DETACHABLE MEDIAL THIGH SUPPORT

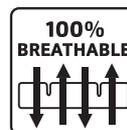
Detachable medial thigh support to gently separate adducted knees/thighs for pressure & pain relief

Follows the body's contours for equal pressure distribution | support IT-coccyx area | managing pelvic asymmetry



Thigh support & leg guidance

Mid height zip closure for easy adjustment when client is seated | cushion keeps its shape, enhancing the individual's skin protection



Ideal for individuals with adducted conditions

Detachable medial thigh support

Cushion and medial thigh support covered separately for ease of use

The Vicair Pommel cushion O2 is ideal for individuals with adducted conditions, where the knees or thighs are pulled together. The cushion's detachable medial thigh support gently separates the knees and/or thighs relieving the area of pressure that could normally result in pain. The SmartCell filling ensures a softer padded surface between the knees and/or thighs, redistributing pressure in this area and therefore also reducing the risk for pressure ulcers.

The detachable medial thigh support has its own separate cover, so it can be removed to facilitate forward transfers or catheterisation whilst remaining in the wheelchair.

PRODUCT PERFORMANCE

Skin protection / Anti decubitus	▲▲▲▲▲
Pressure redistribution	▲▲▲▲▲
Shear force reduction	▲▲▲▲▲
Microclimate control	▲▲▲▲▲
Impact & vibration damping	▲▲▲▲▲

Positioning

Lateral stability	▲▲▲▲△
Frontal stability	▲▲▲▲▲
Sliding reduction	▲▲▲▲▲
Allows manual adjustments	▲▲▲▲▲
Allows easy transfers	▲▲▲▲△

Maintenance & Safety

Durability	▲▲▲▲▲
Reliability	▲▲▲▲▲
Functionality when misused	▲▲△△△
Low maintenance level	▲▲▲▲▲
Level of hygiene	▲▲▲▲▲

Functionality & Application

Comfort	▲▲▲▲▲
Low cushion weight	▲▲▲▲▲
Available size range	▲▲▲▲△
Maximum user weight	▲▲▲▲▲
Low seat to floor height	▲▲▲▲△
Auto adjustments	▲▲▲▲△

USED WITH

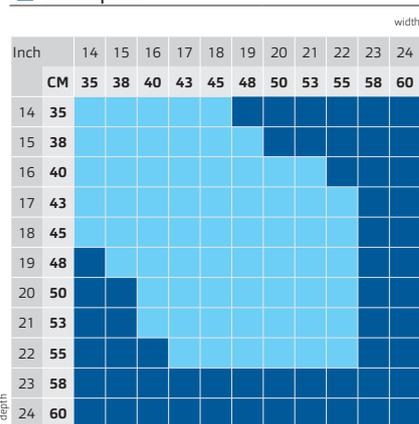
Adduction

TECHNICAL SPECIFICATIONS

Height	10 cm
Average weight	850 grams
Max. user weight	250 kg
Machine washable	60°C max.

CUSHION SIZES

- Standard
- On request



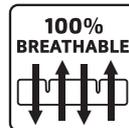
ESPECIALLY DEVELOPED FOR BARIATRICS

Pre-ischial bar limits sliding forward | converts shear into normal forces

Follows the body's contours for equal pressure distribution | support IT-coccyx area | managing pelvic asymmetry



Thigh support



User weight up to 500kg!

Shaped like the Vicair Adjuster O2

Wider size range than other Vicair products

The Vicair XXtra O2 is a wheelchair cushion especially developed for bariatrics. The compartments are filled with bigger SmartCells, offering individuals with a weight of up to 500 kg optimal protection against skin breakdown. The design, based on the Vicair Adjuster O2, combines excellent stability and positioning possibilities with a very high level of comfort. 100% machine washable and breathable, for optimal hygiene and perfect temperature and moisture regulation. The cushion automatically manages small pelvic obliquities, but can be individually adjusted to support more extreme asymmetry.

Despite the large size, the Vicair XXtra O2 is extremely lightweight!

PRODUCT PERFORMANCE

Skin protection / Anti decubitus	▲▲▲▲▲
Pressure redistribution	▲▲▲▲▲
Shear force reduction	▲▲▲▲▲
Microclimate control	▲▲▲▲▲
Impact & vibration damping	▲▲▲▲▲

Positioning	▲▲▲▲▲
Lateral stability	▲▲▲▲▲△
Frontal stability	▲▲▲▲▲
Sliding reduction	▲▲▲▲▲
Allows manual adjustments	▲▲▲▲▲
Allows easy transfers	▲▲▲▲▲△

Maintenance & Safety	▲▲▲▲▲
Durability	▲▲▲▲▲
Reliability	▲▲▲▲▲
Functionality when misused	▲▲▲▲▲△
Low maintenance level	▲▲▲▲▲
Level of hygiene	▲▲▲▲▲

Functionality & Application	▲▲▲▲▲
Comfort	▲▲▲▲▲
Low cushion weight	▲▲▲▲▲
Available size range	▲▲▲▲▲
Maximum user weight	▲▲▲▲▲
Low seat to floor height	▲▲▲▲▲△
Auto adjustments	▲▲▲▲▲△

USED WITH

Obesity, Hemiplegia (CVA), amputations, foot propulsion, kyphosis, pelvic obliquity/tilt/rotation, Spina Bifida, spasms, Fibrodysplasia Ossificans Progressiva (FOP)

TECHNICAL SPECIFICATIONS

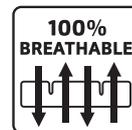
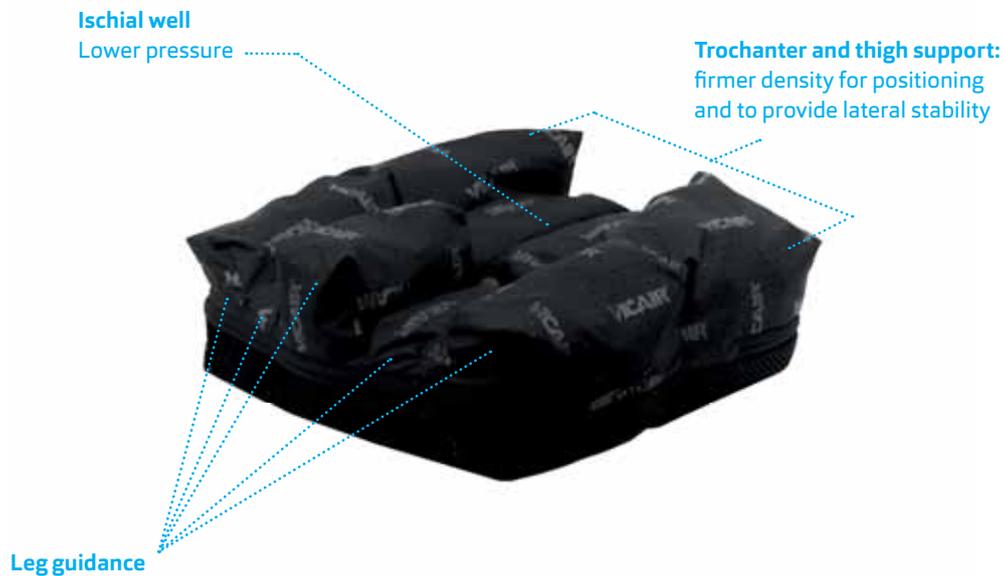
Height	10 cm
Average weight	900 grams
Max. user weight	500 kg
Machine washable	60°C max.

CUSHION SIZES

- Standard
- On request

Inch	width				
	22	24	26	28	30
CM	55	60	65	70	75
18	45				
20	50				
22	55				
24	60				
26	65				
28	70				
30	75				

THE OPTIMAL PAEDIATRIC CUSHION



Especially designed for children

Filled with small-sized SmartCells for optimal pressure redistribution

Built to provide carefree mobility

The Vicair Junior Vector 02 is designed for the child's physique. Based on the Vicair Vector 02 and filled with small-sized junior SmartCells, it provides optimal pressure redistribution and comfort. There are excellent stability and positioning possibilities with this cushion. It offers a solution, for instance, for children with muscle disorders and spasms. 100% machine washable and breathable, for optimal hygiene and perfect temperature and moisture regulation.

The Vicair Junior Vector 02 keeps the child comfortable, safe and protected during its daily adventures.

PRODUCT PERFORMANCE

Skin protection / Anti decubitus	▲▲▲▲△
Pressure redistribution	▲▲▲▲▲
Shear reduction	▲▲▲▲△
Microclimate control	▲▲▲▲▲
Impact & vibration damping	▲▲▲▲▲

Positioning

Lateral stability	▲▲▲▲▲
Frontal stability	▲▲▲▲▲
Sliding prevention	▲▲▲▲▲
Allows manual adjustments	▲▲▲▲▲
Allows easy transfers	▲▲▲▲△

Maintenance & Safety

Durability	▲▲▲▲▲
Reliability	▲▲▲▲▲
Functionality when misused	▲▲▲▲△
Low maintenance level	▲▲▲▲▲
Level of hygiene	▲▲▲▲▲

Functionality & Application

Comfort	▲▲▲▲▲
Low cushion weight	▲▲▲▲▲
Available size range	▲▲▲▲▲
Maximum user weight	▲▲▲▲▲
Low seat to floor height	▲▲▲▲▲
Auto adjustments	▲▲▲▲△

USED WITH

Spasms, muscle disorders

TECHNICAL SPECIFICATIONS

Height	9 cm
Average weight	450 grams
Max. user weight	100 kg
Machine washable	60°C max.

CUSHION SIZES

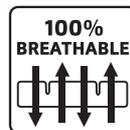
- Standard
- On request

Inch	width					
	10	11	12	13	14	
CM	25	28	30	33	35	
10	25	28	30	33	35	
11	28	30	33	35		
12	30	33	35			
13	33	35				
14	35					

EASY TO USE AND COMFORTABLE

Front and rear compartments | reduces tendency to slide

High quality pressure redistribution | Immersion



Two compartment layout limits sliding

Comfortable

Can be used as a community chair cushion

The Vicair Twin O2 is an easy to use and comfortable wheelchair cushion. It is designed for those who require comfort in combination with a medium level of support and pressure ulcer prevention.

The two compartments of the cushion provide an even pressure distribution and help to prevent sliding forward.

100% machine washable and breathable, for optimal hygiene and perfect temperature and moisture regulation.

The Vicair Twin O2 is lightweight and ready-for-use.

PRODUCT PERFORMANCE

Skin protection / Anti decubitus	▲▲▲▲△
Pressure redistribution	▲▲▲▲△
Shear reduction	▲▲▲▲△
Microclimate control	▲▲▲▲△
Impact & vibration damping	▲▲▲▲△

Positioning	▲▲▲▲△
Lateral stability	▲▲▲▲△
Frontal stability	▲▲▲▲△
Sliding prevention	▲▲▲▲△
Allows manual adjustments	▲▲▲▲△
Allows easy transfers	▲▲▲▲△

Maintenance & Safety	▲▲▲▲△
Durability	▲▲▲▲△
Reliability	▲▲▲▲△
Functionality when misused	▲▲▲▲△
Low maintenance level	▲▲▲▲△
Level of hygiene	▲▲▲▲△

Functionality & Application	▲▲▲▲△
Comfort	▲▲▲▲△
Low cushion weight	▲▲▲▲△
Available size range	▲▲▲▲△
Maximum user weight	▲▲▲▲△
Low seat to floor height	▲▲▲▲△
Auto adjustments	▲▲▲▲△

USED WITH

Neuromuscular, rheumatism, pain relief, in a geriatric environment.

TECHNICAL SPECIFICATIONS

Height	6 and 10 cm
Average weight	650 - 935 grams
Max. user weight	250 kg
Machine washable	60°C max.

CUSHION SIZES\*

- Standard
- On request

Inch	width										
	14	15	16	17	18	19	20	21	22	23	24
CM	35	38	40	43	45	48	50	53	55	58	60
14	35										
15	38										
16	40										
17	43										
18	45										
19	48										
20	50										
21	53										
22	55										
23	58										
24	60										

Displayed sizes are for the 10cm high model. For 6cm high model contact dealer.

**COMFORT AND POSITIONING**

High quality pressure redistribution in the pelvic area | immersion

Thigh support: firmer density to provide lateral stability

Front compartment provides leg-guidance and stability.



**NOT AVAILABLE IN VICAIR O2 RANGE**



**Two side compartments for lateral stability**

**Comfortable**

The Vicair Positioner is an easy to use and comfortable wheelchair cushion. It is designed for individuals who require lateral stability in combination with a medium level of pressure ulcer prevention.

The two compartments in the middle section of the cushion help prevent sliding forward. The two firmer side compartments support the positioning of pelvis and upper legs.

The Vicair Positioner is lightweight and ready-for-use.

**PRODUCT PERFORMANCE**

Skin protection / Anti decubitus	▲▲▲▲△
Pressure redistribution	▲▲▲▲△
Shear reduction	▲▲▲▲△
Microclimate control	▲▲▲▲△
Impact & vibration damping	▲▲▲▲△

**Positioning**

Lateral stability	▲▲▲▲△
Frontal stability	▲▲▲▲△
Sliding prevention	▲▲▲▲△
Allows manual adjustments	▲▲▲▲△
Allows easy transfers	▲▲▲▲△

**Maintenance & Safety**

Durability	▲▲▲▲▲
Reliability	▲▲▲▲▲
Functionality when misused	▲▲▲▲△
Low maintenance level	▲▲▲▲△
Level of hygiene	▲▲▲▲△

**Functionality & Application**

Comfort	▲▲▲▲△
Low cushion weight	▲▲▲▲▲
Available size range	▲▲△△△
Maximum user weight	▲▲▲▲▲
Low seat to floor height	▲▲▲▲▲
Auto adjustments	▲▲▲▲△

**USED WITH**

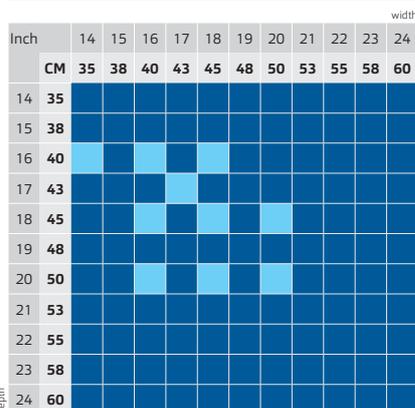
Spinal cord injuries, Osteoarthritis/ arthritis, rheumatism, spondylitis, pain

**TECHNICAL SPECIFICATIONS**

Height	6 and 10 cm
Average weight	650 - 935 grams
Max. user weight	250 kg

**CUSHION SIZES\***

- Standard
- On request



Displayed sizes are for the 10cm high model. For 6cm high model contact dealer.

**ULTRA-LIGHTWEIGHT, EASY TO USE AND COMFORTABLE**

Compartment barrier gently prevents sliding forward

Equal pressure distribution on the seating surface

Auto-adjusting valve



**Air valve automatically adapts the cushion to your client's body shape and weight**

**Two compartment layout limits sliding**

**Easy to clean and disinfect**

The Vicair Liberty is an easy to use and comfortable (wheelchair) cushion. It is designed for those who require comfort in combination with a low to medium level of support and pressure ulcer prevention. The cushion is ready-for-use, rain proof and with two compartments it provides an even pressure distribution. This makes it an ideal cushion for occasional use in a large variety of situations.

This Vicair cushion is extremely lightweight.

**PRODUCT PERFORMANCE**

Skin protection / Anti decubitus	▲▲▲▲△
Pressure redistribution	▲▲▲▲△
Shear reduction	▲▲▲▲△
Microclimate control	▲▲▲▲△
Impact & vibration damping	▲▲▲▲△

**Positioning**

Lateral stability	▲▲▲▲△
Frontal stability	▲▲▲▲△
Sliding prevention	▲▲▲▲△
Allows manual adjustments	▲▲▲▲△
Allows easy transfers	▲▲▲▲△

**Maintenance & Safety**

Durability	▲▲▲▲△
Reliability	▲▲▲▲△
Functionality when misused	▲▲▲▲▲
Low maintenance level	▲▲▲▲▲
Level of hygiene	▲▲▲▲▲

**Functionality & Application**

Comfort	▲▲▲▲△
Low cushion weight	▲▲▲▲▲
Available size range	▲▲▲▲△
Maximum user weight	▲▲▲▲▲
Low seat to floor height	▲▲▲▲▲
Auto adjustments	▲▲▲▲△

**USED WITH**

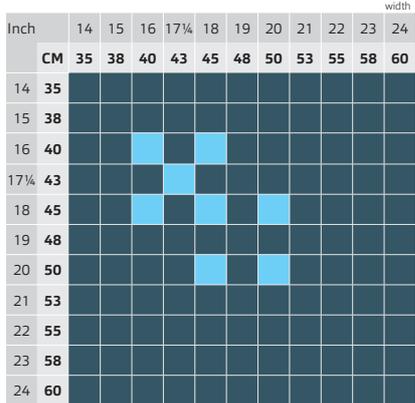
Osteoarthritis/arthritis, rheumatism, spondylitis, pain relief, mobility problems, in a geriatric environment.

**TECHNICAL SPECIFICATIONS**

Height	5 cm
Average weight	350 grams
Max. user weight	150 kg

**CUSHION SIZES**

- Standard
- Not available



**FOR A COMFORTABLE TOILET VISIT**



**Changes the hard toilet seat into a comfortable seating surface**

**Straps for an easy fix onto the toilet seat**

**Watertight which makes it easy to clean and disinfect**

The Vicair Liberty TC is a toilet seat cushion that offers comfort and skin protection during toilet visits. It is easy to install: simply strap the lightweight cushion onto the toilet seat. And of course it is easy to clean and disinfect.

**PRODUCT PERFORMANCE**

Skin protection / Anti decubitus	▲▲▲▲▲
Pressure redistribution	▲▲▲▲▲
Shear force reduction	△△△△△
Microclimate control	△△△△△
Impact & vibration damping	△△△△△

**Positioning**

Lateral stability	△△△△△
Frontal stability	△△△△△
Sliding reduction	△△△△△
Allows manual adjustments	△△△△△
Allows easy transfers	▲▲△△△

**Maintenance & Safety**

Durability	▲▲▲△△
Reliability	▲▲▲▲△
Functionality when misused	▲▲△△△
Low maintenance level	▲▲▲▲▲
Level of hygiene	▲▲▲▲▲

**Functionality & Application**

Comfort	▲▲▲△△
Low cushion weight	▲▲▲▲▲
Available size range	▲▲▲△△
Maximum user weight	▲▲▲▲▲
Low seat to floor height	▲▲▲▲▲
Auto adjustments	△△△△△

**USED WITH**

(Extremely) thin persons, elderly people, paraplegia, bladder-spasms, bowel management (enemas) after Spinal Cord Injuries

**TECHNICAL SPECIFICATIONS**

Height	5 cm
Average weight	350 grams
Max. user weight	150 kg

**CUSHION SIZES**

cm	inches
43x43	17x17
50x45	20x18

Sizes in width x depth

The VICAIR logo is displayed in a bold, white, sans-serif font. The letters 'V', 'I', 'C', 'A', and 'I' are connected, and the 'R' is separate. A registered trademark symbol (®) is located at the top right of the 'R'. The logo is set against a dark blue background that is part of a larger graphic design featuring a blue triangle and a black fabric with the brand name repeated in a lighter blue color.

# SOFT BACK

**Extremely lightweight**

**Easy to apply**

**Easy to set up**

**Highly adjustable,  
so better positioning  
options and comfort**

**Little to no maintenance**

SPECIFICALLY DESIGNED FOR REA AZALEA



Under its cover you will find **SmartCell-compartments** for pressure redistribution and positioning



Two side compartments for lateral support | Easy to combine with side supports

Cover made of 3D mesh spacer fabric for extra comfort and microclimate control

**PRESSURE  
ULCER  
TREATMENT**

**Superior pressure distribution and optimal positioning**

**13 adjustable compartments**

**Built in lateral support**

The Vicair Flex Back is a wheelchair back cushion designed exclusively for use with the Invacare Rea Azalea Flex 3 backrest system. The 13 easily adjustable compartments make it an ideal choice for positioning and pressure redistribution. The central compartment allows you to offload around the spinal cord. The Vicair Flex Back has built in lateral supports and can be used in combination with side supports. This Vicair back cushion uses 3D mesh spacer fabric for extra comfort and microclimate control.

**PRODUCT PERFORMANCE**

Skin protection / Anti decubitus	▲▲▲▲△
Pressure redistribution	▲▲▲▲▲
Shear reduction	▲▲▲▲△
Microclimate control	▲▲▲△△
Impact & vibration damping	▲▲▲▲▲

<b>Positioning</b>	▲▲▲▲▲
Lateral stability	▲▲▲▲▲
Frontal stability	▲▲▲▲△
Sliding prevention	▲▲▲▲▲
Allows manual adjustments	▲▲▲▲▲
Allows easy transfers	▲▲▲▲△

<b>Maintenance &amp; Safety</b>	▲▲▲▲▲
Durability	▲▲▲▲▲
Reliability	▲▲▲▲▲
Functionality when misused	▲▲▲▲△
Low maintenance level	▲▲▲▲△
Level of hygiene	▲▲▲▲△

<b>Functionality &amp; Application</b>	▲▲▲▲△
Comfort	▲▲▲▲▲
Low cushion weight	▲▲▲▲▲
Available size range	▲▲▲▲▲
Maximum user weight	▲▲▲▲▲
Low seat to floor height	△△△△△
Auto adjustments	▲▲▲▲△

**USED WITH**

Scoliosis, Kyphosis, Neuromuscular diseases, Spinal cord injuries, pressure sore on back/spine/shoulder, pain relief

**TECHNICAL SPECIFICATIONS**

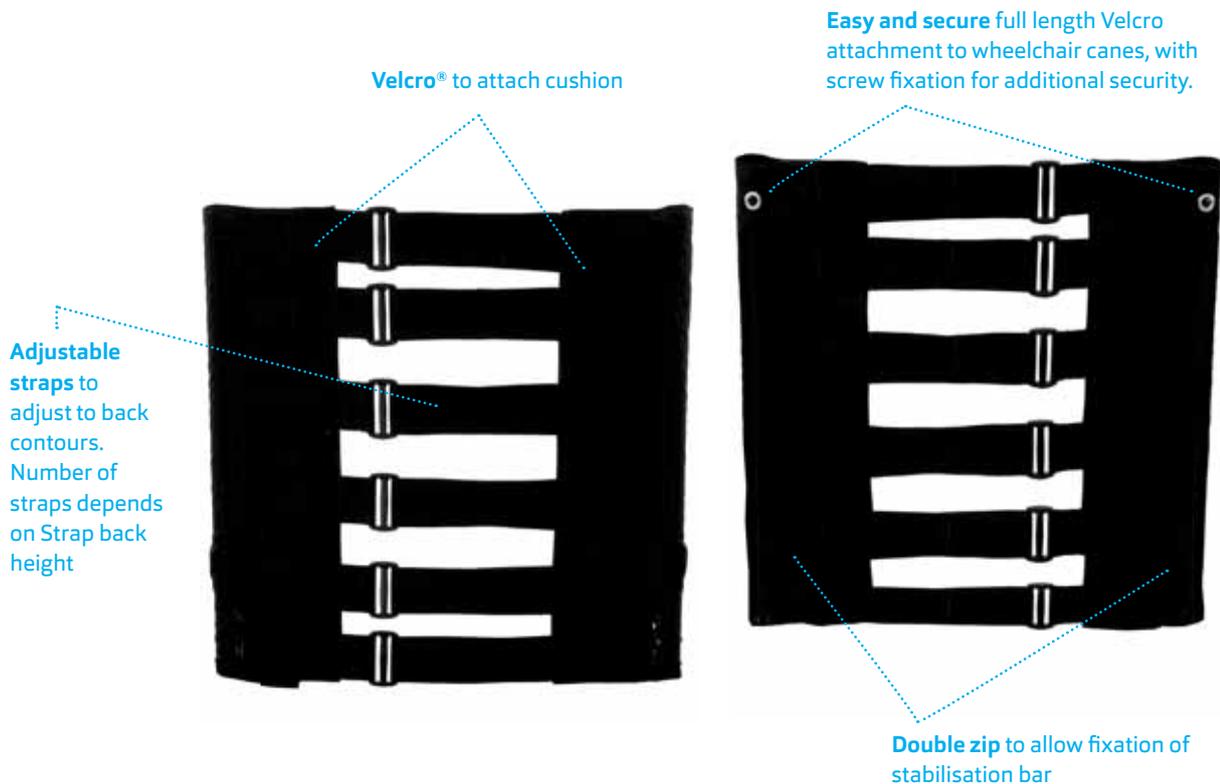
Length	32-56 cm
Average weight	900 grams
Max. user weight	150 kg

**CUSHION SIZES**

- Standard
- On request

Inch	width				
	16½	17	18	18¾	19½
CM	41	43	45	47	49
22	▲	▲	▲	▲	▲
22½	▲	▲	▲	▲	▲
22¾	▲	▲	▲	▲	▲
23	▲	▲	▲	▲	▲
23½	▲	▲	▲	▲	▲
24	▲	▲	▲	▲	▲

**PERFECT TO USE IN COMBINATION WITH VICAIR ANATOMIC BACK**



**Easy to apply on manual wheelchairs**

**Perfect positioning and comfort qualities**

**Very lightweight**

The Vicair tension-adjustable (Strap) back is a perfect base for Vicair wheelchair back cushions. Quickly installed and combined with your choice of Vicair back cushion it is a high quality alternative to your standard wheelchair back system. The adjustable straps enhance the function of the Vicair back cushions, by offering thoracic stability and backrest positioning.

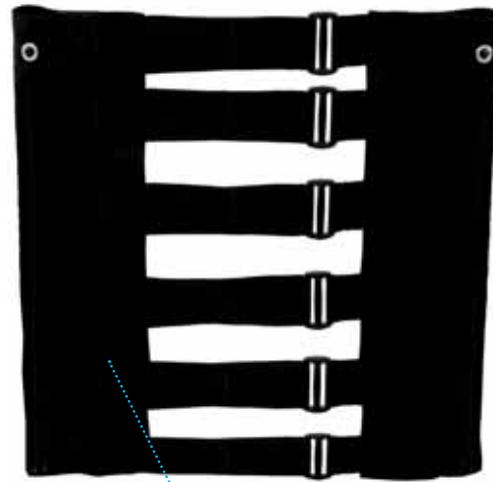
**USED WITH**

Vicair Liberty back, Vicair Anatomic back

**TECHNICAL SPECIFICATIONS**

Max. user weight 150 kg

**OPTIMAL POSITIONING AND SUPPORT FOR EVERY INDIVIDUAL IN A MANUAL WHEELCHAIR**



**PRESSURE  
ULCER  
TREATMENT**

**Optimal positioning through a combination of SmartCells and Strap back**

**Offloading the spinal column**

**Dynamically moulds to a person's back contours**

The Vicair Anatomic back is a highly comfortable universal back system, that enables optimal positioning and high quality pressure redistribution. Ready for use, as it dynamically moulds to the contours of the client's back, but also allowing a large variety of individual adjustments. Adjustments can be made with the client still leaning against the cushion. The lightweight cushion is used in combination with the easy-install Vicair Strap back and can be used in wheelchairs without a back support plate. It is extremely suitable to use with (extreme) Scoliosis. The Anatomic back follows asymmetric body contours and keeps your client safe and stable.

**PRODUCT PERFORMANCE**

Skin protection / Anti decubitus	▲▲▲▲△
Pressure redistribution	▲▲▲▲▲
Shear reduction	▲▲▲▲△
Microclimate control	▲▲▲△△
Impact & vibration damping	▲▲▲▲△

<b>Positioning</b>	▲▲▲▲△
Lateral stability	▲▲▲▲△
Frontal stability	▲▲▲▲△
Sliding prevention	▲▲▲▲▲
Allows manual adjustments	▲▲▲▲▲
Allows easy transfers	▲▲▲▲△

<b>Maintenance &amp; Safety</b>	▲▲▲▲▲
Durability	▲▲▲▲▲
Reliability	▲▲▲▲▲
Functionality when misused	▲▲▲▲△
Low maintenance level	▲▲▲▲△
Level of hygiene	▲▲▲▲△

<b>Functionality &amp; Application</b>	▲▲▲▲△
Comfort	▲▲▲▲▲
Low cushion weight	▲▲▲▲▲
Available size range	▲▲▲▲▲
Maximum user weight	▲▲▲▲▲
Low seat to floor height	△△△△△
Auto adjustments	▲▲▲▲△

**USED WITH**

Scoliosis, Kyphosis, Neuromuscular diseases, Spinal cord injuries, pressure sore on back/spine/shoulder, pain relief

**TECHNICAL SPECIFICATIONS**

Height	32-56 cm
Average weight	900 grams
Max. user weight	150 kg

**CUSHION SIZES**

- Standard
- On request

		width				
Inch	CM	12	14	16	18	20
			30	35	40	45
length	12¾	32	35	40	45	50
	16	40	45	50	55	60
	19	48	55	60	65	70
	22½	56	65	70	75	80

# CLINICAL CASE Treating a category IV pressure ulcer on the spine and solving lateral trunk instability.

## Background

All wheelchair users are at risk of developing skin damage. When there are additional aggressive positioning needs, this risk only increases. This clinical case describes the treatment of a category IV pressure injury and the process of achieving lateral trunk stability. The person in this case study is a CVA patient with hemiplegia.

Mr. W. is an active 80-year-old male, who is still living life to the fullest. In 2010 Mr. W. suffered a CVA (aneurism in the cerebri media), resulting in a coma and hemiplegia. After one day Mr. W. awoke from his coma. Surgery was performed immediately, including a coiling procedure, at the Academic Medical Centre in Alkmaar (The Netherlands).

After a 6-month rehabilitation period at the Military Rehabilitation Centre Aardenburg, Mr. W. had recovered from the paralysis of his left leg caused by the CVA.

In 2011 a manual wheelchair was purchased, as the fatigued Mr. W. still wanted to fully participate in society. Because of his poor posture in this chair, a category II pressure injury on his spine developed. In an attempt to solve the poor posture and the pressure injury, the Rehabilitation Centre's occupational therapist prescribed a power tilt-in-space wheelchair, with the intention that this chair would help to improve the body posture. The chair's tilt-function should also redistribute the pressure.

However, in the period 2011-2014 the pressure injury problem was never fully resolved. In this period the kyphotic posture got worse because of osteoporosis. To treat fibromyalgia a low dose of prednisone was added to the list of daily medication. The patient also increasingly suffered from polyneuropathy, resulting in intense sharp pains.

In 2015 I became Mr. Th. W.'s outpatient occupational therapist. I asked the local council health department to provide him with a Vicair back cushion.

## The Problem

The tilt-in-space chair was provided with a Deep Contour foam back cushion. This back cushion provided insufficient pressure redistribution. Also it did not

provide optimal body posture as it was not able to fully follow the kyphotic body contours. The small wound on his



February 2012

May 2012



January 2015

March 2015



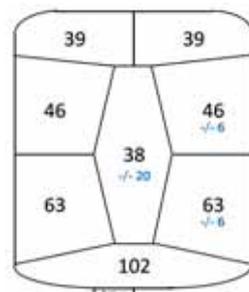
April 2015

June 2015

spine had progressed into a category IV pressure injury (see pictures).

## Implementing Vicair into the seating solution

Through the use of the Vicair Multifunctional back we were able to offload the pressure on the pressure injury area. We removed SmartCells from the



Fillingrade overview + adjusted compartments centre compartment to achieve this.

Because of the depth of the Vicair back support we were better able to follow the contour of his kyphosis, resulting in improved pressure distribution.

When Mr. W. became tired, he tended to lean to the right. By fixing a lateral support with a Vicair custom made insert on the wheelchair back, Mr. W. was sufficiently supported and able to maintain his upright position. The Vicair custom made insert should also help to optimally redistribute pressure to prevent pressure



sores in that area.

## The Conclusion

The pressure redistribution and high level of comfort provided by the Vicair Multifunctional back, enabled him to rest in the tilt position of his chair without experiencing any pain.

After 3 months of using the Multifunctional back the category IV pressure injury on his spine has healed (see picture below).

Mr. W. experiences less pain when driving in his power wheelchair. This increases his independence. Mr. W. feels that he is finally in control of his own seating position. As a result pain relief medication was reduced: from 8 to 2 daily morphine pills.

By using the Vicair Multifunctional back and lateral support Mr. W.'s comfort, pressure redistribution and stability have improved significantly. With the pressure injury healed Mr. W. has more independence, as the amount of wound care and pain medication could be reduced. Because of this Mr. W. has a clearer mind and is able to stay active for longer periods during the day.

Altogether these improvements enable Mr. W. to do what he wants to do most: to live life to the fullest.

**Anneke Vogelenzang, OT & Owner**  
"Ergotherapie West Friesland"



After 3 months the category IV pressure injury on his spine has healed

**THE BEST BACK SUPPORT FOR INDIVIDUALS IN MANUAL TILT-IN-SPACE WHEELCHAIRS AND POWERCHAIRS**



**PRESSURE  
ULCER  
TREATMENT**

**Optimal immersion when using a solid back wheelchair**

**Easy to adjust while the client leans against the cushion**

**Optimal pressure redistribution**

Excellent pressure redistribution, comfort and support make this back cushion perfect for use in a large variety of situations. It can be used in several types of back systems and on tilt-in-space chairs with adjustable seat depth. The cushion is easily fixed onto the solid backrest by use of Velcro®. Although it automatically adapts to the body's contours, the cushion can also be adjusted for optimal positioning, while the client is still leaning against the cushion. Optionally available is a head support cushion, for ultimate comfort and pressure redistribution.

**PRODUCT PERFORMANCE**

Skin protection / Anti decubitus	▲▲▲▲△
Pressure redistribution	▲▲▲▲▲
Shear reduction	▲▲▲▲△
Microclimate control	▲▲▲▲△
Impact & vibration damping	▲▲▲▲▲

<b>Positioning</b>	▲▲▲▲△
Lateral stability	▲▲▲▲△
Frontal stability	▲▲▲▲△
Sliding prevention	▲▲▲▲▲
Allows manual adjustments	▲▲▲▲▲
Allows easy transfers	▲▲▲▲△

<b>Maintenance &amp; Safety</b>	▲▲▲▲▲
Durability	▲▲▲▲▲
Reliability	▲▲▲▲▲
Functionality when misused	▲▲▲▲△
Low maintenance level	▲▲▲▲△
Level of hygiene	▲▲▲▲△

<b>Functionality &amp; Application</b>	▲▲▲▲△
Comfort	▲▲▲▲▲
Low cushion weight	▲▲▲▲▲
Available size range	▲▲▲▲▲
Maximum user weight	▲▲▲▲▲
Low seat to floor height	△△△△△
Auto adjustments	▲▲▲▲▲

**USED WITH**

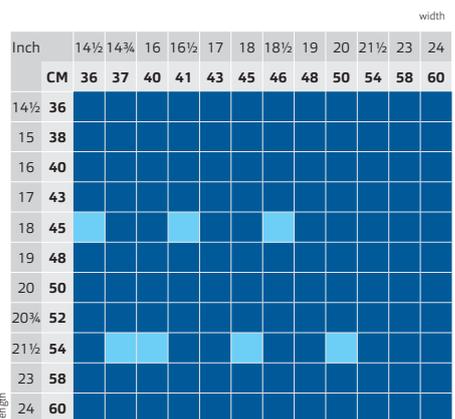
Neuromuscular diseases, Scoliosis, Kyphosis, Lordosis, Gibbus, Quadriplegia, pain relief, in a geriatric environment

**TECHNICAL SPECIFICATIONS**

Length	36-60 cm
Average weight	1.300 grams
Max. user weight	150 kg

**CUSHION SIZES**

- Standard
- On request



**EXCLUSIVELY DESIGNED FOR THE MATRIX ELITE DEEP**



**PRESSURE  
ULCER  
TREATMENT**

**Optimal immersion when using the Matrix Elite Deep backshell**

**Offloading of the spine**

**Excellent lateral stability**

The Vicair Matrix Elite Air is specifically designed to combine Vicair SmartCell technology with the stable aluminium shell of the Matrix Elite Deep backrest. This combination is ideally suited for active individuals with a kyphotic curvature or the potential for skin breakdown. The design caters for complex seating needs where enhanced stability is required, providing lateral trunk support while still allowing clearance for the shoulders and hips alongside delivering a high level of skin protection to prevent pressure ulcers.

**PRODUCT PERFORMANCE**

Skin protection / Anti decubitus	▲▲▲▲△
Pressure redistribution	▲▲▲▲▲
Shear reduction	▲▲▲▲△
Microclimate control	▲▲▲▲△
Impact & vibration damping	▲▲▲▲▲

**Positioning** ▲▲▲▲△

Lateral stability	▲▲▲▲▲
Frontal stability	▲▲▲▲△
Sliding prevention	▲▲▲▲▲
Allows manual adjustments	▲▲▲▲▲
Allows easy transfers	▲▲▲▲△

**Maintenance & Safety** ▲▲▲▲▲

Durability	▲▲▲▲▲
Reliability	▲▲▲▲▲
Functionality when misused	▲▲▲▲△
Low maintenance level	▲▲▲▲△
Level of hygiene	▲▲▲▲△

**Functionality & Application** ▲▲▲▲△

Comfort	▲▲▲▲▲
Low cushion weight	▲▲▲▲▲
Available size range	▲▲▲▲▲
Maximum user weight	▲▲▲▲▲
Auto adjustments	▲▲▲▲△

**USED WITH**

Neuromuscular diseases, Scoliosis, Kyphosis, pain relief

**TECHNICAL SPECIFICATIONS**

Average weight	900 grams
Max. user weight	150 kg

**CUSHION SIZES**

- Standard
- On request

Inch	width				
	16	17	18	19	20
CM	40	43	45	48	50
length	16	40			
	18	45			
	20	50			

**IMMEDIATE RELIEF**

Double rings on the 4 corners of the mattress, to loosely attach bedsheets to prevent "hammocking"

36 compartments with dynamic SmartCell air-filling



Combination of middle layer and low friction mattress cover to minimize shear forces and optimize immersion



**Optimal pressure redistribution**

**Pain relief**

**Extremely suitable for immobile individuals**

Pain relief, unrest reduction, pressure ulcer prevention. These are just some examples of the immediate relief provided by the Vicair Mattress 415.

The design offers optimal pressure redistribution, reduction of shear forces, optimal immersion and stable – yet comfortable – positioning. Even with existing decubitus stage I-IV (clinically proven. Visit [www.thinkpressurecare.co.uk](http://www.thinkpressurecare.co.uk) for more information).

If a situation requests an individual solution: custom sizes and shapes are available on request.

The Vicair Mattress 415 is low maintenance and comes with a fluid proof cover.

It can be used on any type of bedframe and bedframe position (e.g. fowler's position).

CPR can be performed on a patient without the use of a board.

The Vicair SmartCell air-filling makes the Vicair Mattress 415 an extremely lightweight and non-powered alternative to other air-technique replacement mattresses.

**USED WITH**

Pressure ulcers (stage I-IV), rheumatism, burn victims, terminal illness, spasms, kyphosis, pain management.

**TECHNICAL SPECIFICATIONS**

Height	15 cm
Average weight	10 kg
Max. user weight	250 kg

**MATTRESS SIZES**

- Standard
- On request

Inch	width															
	27	28	30	32	34	36	38	40	42	44	46	48				
CM	68	70	75	80	85	90	95	100	105	110	115	120				
56	140															
72	180															
74	185															
76	190															
78	195															
80	200															
82	205															
84	210															
86	215															
88	220															

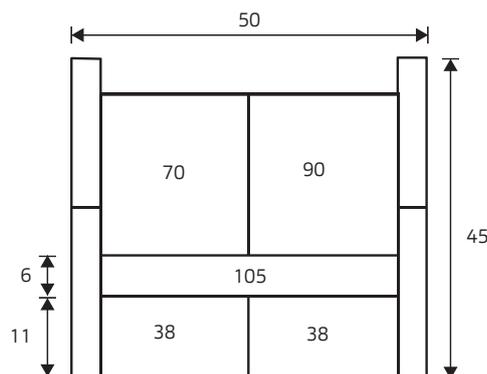
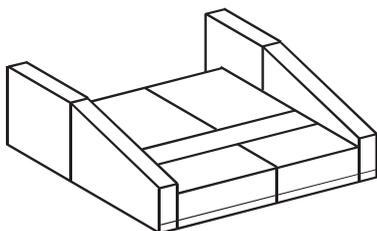
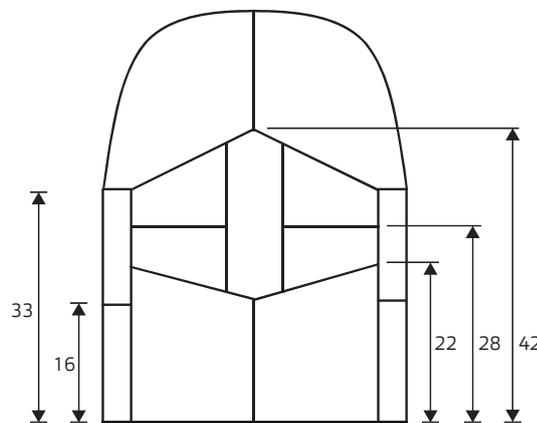
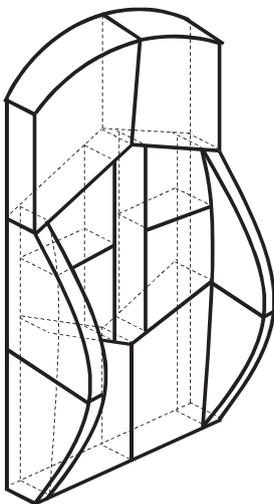
# CUSTOM MADE ENDLESS POSSIBILITIES

Medical practitioners often work with complex cases in the field of seating and positioning. Generally our Vicair Adjuster O2 and Vector O2 cushions are able to offer a solution, but sometimes it is necessary to provide a solution that is custom made for the client. For those situations it is possible to create a Vicair Custom Made seat- or back cushion.

Since 1993 Vicair has been creating products specifically designed for clients with complex disabilities or with specific body contours. The flexibility of the Vicair technique, based on SmartCells, makes this relatively easy to do. Our R&D team department consists of a medical doctor, a physiotherapist and a product designer.

The request for a Vicair Custom Made product is usually made by one of the product specialists of our distributors. They work closely together with the medical practitioner in the process of ordering the Vicair Custom Made product.

First the specific case is discussed in a Vicair R&D team meeting. Based on the description of the client's medical background and needs, the R&D department is able to start designing the product by creating a 3D drawing. The drawing will be discussed with the product specialist and the medical practitioner. After the design has been approved, the production of the cushion commences. Vicair has its own Product Design Studio, so within a few weeks the Vicair Custom Made product is ready to be shipped. The medical practitioner further guides the installation of the product.



# QUALITY WARRANTY ISO



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## Quality

Vicair is devoted to the development and production of products that will positively influence the daily comfort of the wheelchair user, to offer him or her as much freedom as possible.

We expect our products to be of very high quality, to ensure a reliable and safe result. During production all procedures and processes are performed as documented in our quality management system, in which we have implemented the applicable ISO standards and CE regulations.

## Warranty

Vicair offers a limited warranty against defects in workmanship and materials for a period of 24 months (for mattresses this is 5 years) after the original date of purchase, provided the product has been used normally. Any damage arising from abnormal use, or caused by improper handling, cleaning, or negligence, is excluded from this warranty. Should a defect in materials or workmanship occur within 24 months (for mattresses this is within 5 years) from the original date of purchase, Vicair will, at its own choice, repair or replace the product free of charge. The cushion cover is excluded from this warranty. The latest generation Vicair SmartCells (grey with black logo print) have a lifelong warranty period.

Remedies for breach of express warranties herein are limited to repair or replacement of the product. In no event shall damages for breach of any warranty include any consequential damages or exceed the cost of non-conforming goods sold.

## ISO certified

Vicair is ISO 13485 certified. This means it has a comprehensive quality management system for the design and manufacture of medical devices.

relief by air

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