



Life Without Compromise

At VARILITE our goal is to help people who use wheelchairs for mobility to lead empowered, independent, and connected lives. We strive to design effective and innovative postural support solutions.

My Meridian™ cushion is the best seat in the house.

On August 27th of 2007, after years of back and leg pains and 13 previous back surgeries, I had the 2nd stage of a 5th level lumbar fusion. During the procedure my spinal cord was pinched and not discovered for 4 days. A reversal procedure was performed, and as a result I ended up paralysed from the waist down due to what is called Cauda Equina.

I did about 4 weeks of in-patient rehabilitation and during that time my therapist had me try a few different styles of chairs and cushions. My therapist did a great job picking the wheelchair and cushion for me. Since I was newly injured I didn't have a clue about knowing what to get in the world of wheelchairs and cushions. I was sent home with a "loaner



chair" that was in pretty rough shape. The cushion I went home with is referred to as a gel style cushion, which is supposed to be "fluffed" each time I got back into the wheelchair. The gel seat cushion I had caused some real painful problems for me in my legs. It was very painful when I transferred, so I stayed in my wheelchair for long periods of time to avoid transferring. The pain continued until I got THE call, my new wheelchair was ready! When I finally got my new wheelchair it was heaven.

My new wheelchair came equipped with a *VARILITE* Meridian™ cushion, which my physical therapist had ordered for me after pressure mapping me while I was an in-patient. Immediately, the fluid retention in my legs and feet improved. The ease of adjusting the pressure is so easy compared to the gel! I am super busy all day with long hours sitting in my wheelchair, and since I tend to forget to do pressure releases I have my *VARILITE* Meridian cushion to thank for not having skin issues because of my forgetfulness.

As a testimonial to the comfort of the cushion, my daughter sits in my wheelchair while I am at physical therapy. When I want to get my wheelchair back, she says it is too comfortable. Also at family gatherings, my children and grandchildren fight over the wheelchair because it's the most comfortable seat in the house!

~Guy Clark



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Healthcare Innovations Australia Pty Ltd is the licensed distributor of Varilite products in Australia. As well as the range of Varilite seating systems, we also offer the following ranges;

- Varilite wheelchair back systems
- FSA pressure mapping systems
- Smartwheel wheelchair propulsion assessment devices
- Shear Comfort Skin Care products
- Shear Comfort Foot Care products
- Penco walker glides
- See4safety mobility lights
- Dynaspine wheelchair back systems
- BAM Biometric Sensors





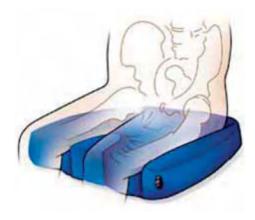
Life Without Compromise

Air Foam Flotation

Air-foam flotation combines the best characteristics of air and foam to provide excellent pressure distribution, comfort and stability, all in an ultra-lightweight seat cushion. The air in a VARILITE cushion supports the load, while the foam keeps the air where it is needed, preserves the cushion shape and prevents bottoming out.

Because air supports most of the weight, low density foam can be used, resulting in an ultra-lightweight cushion with less push-back or interface pressure.

Air-foam flotation works because of immersion. VARILITE air-foam cushions use multi-stiffness foams to provide support and conformation under different areas of the user. A valve releases air to immerse the user in the foam, and the different foams conform to the user's shape. As immersion increases, the load is distributed over more of the cushion's surface area and thus pressure points are reduced.



Optimum pressure distribution is achieved when the load is distributed over the largest surface area.

Second Second

Cover

The cover is an essential part of a VARILITE cushion; enhancing pressure distribution and promoting air and water vapour circulation through the reticulated foam, the cover assists the preservation of healthy skin tissue. The reticulated foam also reduces the interference from a user's clothing (e.g. Pockets, buttons, studs, etc.) with regards to pressure relief. Additionally, the cover serves to protect the cushion from punctures, burns, and soiling.

To ensure user safety, the underside of our cover is made of a non-skid material with adhesive velcro pads for added security. All VARILITE covers meet ISO 7176-16 ignition resistance standards for upholstered wheelchair components.

VARILITE covers are available in mesh and incontinence at no additional charge. The purchase of a spare cover is highly recommended for added longevity and for continued cushion use during washing of the primary cover.

Two-way Stretch Bonded Fabric

The foam of the cushion is bonded to a two-way stretch fabric to allow for maximum contouring and immersion of the body into the foam, increasing the surface area and thus maximising the pressure distribution.

Self-Inflating: Standard and PSV Valve

VARILITE cushions incorporate a self-inflating valve system for quick and easy set-up without the need for pumps. Dependant upon the model, cushions are available with either a standard valve or a PSV (Pressure Setting Valve).

The PSV is marked with three pre-set positions, which provide the best range of immersion for most users (therapists are able to mark a different position on the PSV if the user falls outside of this predetermined range). The PSV works by sensing the amount of internal cushion pressure and automatically shutting off the flow when it senses enough pressure has been released. This ensures simple and consistent adjustment which can improve patient compliance.



A wheelchair cushion has many jobs to do and roles to play. Cushions that excel in one area may be weaker in others. At VARILITE we pride ourselves on being able to offer cushions that excel in many areas. VARILITE cushions are designed to cope with the user's every need. Cushions without compromise!

Without Compromise on:

Comfort

Comfort in seating and comfort in use are important considerations in cushion selection. VARILITE cushions offer both, with the comfort of air-foam flotation, and the ease of use provided by the self—inflating valve.

Pressure Distribution

As air is released from a VARILITE cushion, the user is immersed in the foam, maximising surface contact and reducing pressure points. In a recent, independent study, VARILITE cushions significantly outperformed standard foam cushions when comparison testing was conducted across envelopment, dispersion, maximum pressure and peak pressure index (see page 30).

Postural Support

VARILITE cushions use multi-stiffness foams for stability. As air is released, the user is immersed deep in soft foam while firmer foams provide contoured support. The result is exceptional stability and increased confidence during manual propulsion and other activities.

Vibration Dampening

Vibration reduction is as important as static pressure relief. Vibration can result in discomfort, fatigue, poor body mechanics and joint strains. The combination of air and foam in VARILITE cushions is proven to offer best-in-class performance in terms of vibration dampening. (RESNA 2000—see page 31).

Low Maintenance

As VARILITE cushions are self-inflating, they require no pumps, no kneading, no manipulation, and no repositioning of gel. A simple turn of the valve is all that is required to achieve a customised fit, encouraging compliance and negating the need for accessory parts.

Temperature Transfer

The combination of air and foam in VARILITE cushions allows the cushion to regulate temperatures effectively. Temperature regulation is important for the maintenance of skin tissue integrity. The reticulated foam in the cover further enhances air circulation.

Weight

Excessive cushion weight can inhibit mobility, increase the risk of joint strain and ultimately reduce quality of life. Due to the use of air to support the majority of the load, low density foam to be used within VARILITE cushions. The end result being that ALL VARILITE cushions are super-lightweight. This promotes easier propulsion, easier dismantling for transfer and an easy day-to-day life.

Transfers

Cushions that facilitate poor transfers can lead to joint strain, or simply inhibit compliance. The combination of the cover material and the foam in VARILITE cushions makes transferring in and out of the chair easy, whilst the low weight of the cushions makes dismantling the wheelchair for transfer a significantly less laborious process.

Cushion Life

VARILITE cushions have a long life as air reduces the foam compression, while foam protects against bottoming out, even if the outer material is punctured.

The cushions long life is easily maintained by simply re-setting the cushion once a week. All VARILITE cushions (excluding covers) are covered by a two (2) year limited warrantee from the date of purchase (please refer to warranty for full terms and conditions).





USER NEEDS

Level of Skin Protection

Seat cushion Selection Guide





ProForm NX

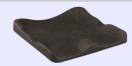
high

Evolution, Evolution PSV & Wave

high

High	High
maximum & modifiable	maximum
closed-cell foam	multi-stiffness foam
contoured base	multi-stiffness foam, Wave CPB, Wave LPB
contoured base	multi-stiffness foam, Wave CPB, Wave CPW
contoured base	multi-stiffness foam, Wave CPB, Wave LBP, Wave CPW
standard	standard or PSV
2 (rear left and right)	1
yes	Wave
standard mesh or incontinence	standard mesh or incontinence
1'500g	999g
30x35; 35x35; 35x40	30x35; 35x35; 35x40; 35x45; 35x50; 40x35
38x38; 38x43; 40x40; 40x45; 40x50; 43x43; 45x40; 45x45; 45x50; 50x40; 50x45; 50x50	38x38; 38x43; 40x40; 40x45; 40x50; 43x43; 45x40; 45x45; 45x50; 50x40; 50x45; 50x50
-	55x45; 55x50; 60x45; 60x50
8	12
	maximum & modifiable closed-cell foam contoured base contoured base contoured base standard 2 (rear left and right) yes standard mesh or incontinence 1'500g 30x35; 35x35; 35x40 38x38; 38x43; 40x40; 40x45; 40x50; 43x43; 45x40; 45x45; 45x50; 50x40; 50x45; 50x50 -

Wave Descriptions



CPB - Contoured Positioning Base







Maria	lian	S. N	1arid	ian \	Wave
vienc	ılalı	a i	vieriu	Iall	vvave

Zoid PSV

Reflex

high	moderate	moderate		
maximum	mild	mild		
multi-stiffness foam	multi-stiffness foam	foam cut outs		
multi-stiffness foam, Wave CPB, Wave CPW	multi-stiffness foam	multi-stiffness foam		
multi-stiffness foam, Wave CPB, Wave CPW	-	multi-stiffness foam		
multi-stiffness foam, Wave CPB, Wave LBP, Wave CPW	multi-stiffness foam	multi-stiffness foam		
standard	PSV	self adjusting		
2 (front and back)	1	1		
Wave	no	no		
standard mesh or incontinence	standard mesh or incontinence	incontinence		
999g	860g	860g		
30x35; 35x35; 35x40; 35x45; 35x50; 40x35	30x20; 30x30; 30x35; 35x35;35x40 35x45	30x30; 30x35; 35x35; 35x40; 35x45; 35x50; 40x45		
38x38; 38x43; 40x40; 40x45; 40x50; 43x43; 45x40; 45x45; 45x50; 50x40; 50x45; 50x50	38x38; 38x43; 40x40; 40x45; 40x50; 43x43; 45x40; 45x45; 45x50; 50x40; 50x45; 50x50	38x38; 38x43; 40x40; 40x45; 40x50; 43x43; 45x40; 45x45; 45x50; 50x40; 50x45		
55x45; 55x50; 60x45; 60x50	-	-		
16	22	24		



LPB - Lateral Positioning



CPW - Contoured Positioning Wedge



ProForm NX



Therapists recommend the ProForm NX for individuals with leg length discrepancies, amputations, other pelvic obliquities and other positioning challenges. Prescribers value this cost-effective and easy-to-customize, off-the-shelf, product. Users and caregivers value the durability and adjustability of the ProForm NX.

The cushion of choice for wheelchair users with challenging positioning and postural support requirements



The ProForm NX provides a value-for-money solution for most seating positioning challenges (for examples please refer to p10)

- Off the shelf, but highly modifiable to cater for your client's individual needs
- Air-foam flotation, dual chambered, cushion with individually adjustable compartments
- Valves for pelvic adjustment positioning at the front
- No user weight restrictions

ProForm NX is available with the following options:

Cover: Mesh or Incontinence

Valve: Standard

Air-Foam Flotation Cushion: Single-Chamber or Dual-Chamber



A modifiable contoured base, superior pressure distribution, asymmetrical positioning options, comfort and simplicity makes the ProForm NX an ideal off-the-shelf solution when a customisable wheelchair cushion is needed.

3. Modifiable Thigh Cushion

Closed-cell foam Thigh Cushion contours over the medial thigh separator and anterior laterals for added comfort and stability. Modifiable Thigh Cushion is easy to modify with a blade or knife to match changes made to the Contoured Base. Non-absorbent and washable.

4. Valves for Adjusting Air Volume

Easy to use two way air valves allow simple and efficient adjustment. With a simple turn of the valves adjustments can be made to the independent right and left pelvic chambers, releasing air to immerse the user in the foam. The foam contours to the user and the user's weight is distributed over the surface of the cushion.

5. Cover

ProForm NX is available with a mesh or incontinence cover with breathable four-way-stretch material. Reticulated foam inside promotes air exchange and improves pressure distribution. The underside is a rugged nonslip material with hook and loop for added security. The ProForm NX cover meets ISO 7176-16 ignition standards for upholstered wheel-chair components and is machine washable.

6. Modifiable Wedge

A modifiable closed-cell foam wedge is standard with each ProForm NX. The modifiable wedge increases the weight-bearing load on the back of the thighs and decreases the load on the buttocks, without changing the seat-to-back angle. The 5cm (2") tapered wedge trims easily for custom fitting.

1. Contoured Base

Closed-cell foam base will not absorb fluid and is resistant to bacteria. The base can be cut with a knife or blade to accommodate drop-base seats, leg-length discrepancies, and "hot-spots". Laterals and deep ischial pan provide maximum immersion and pressure distribution. Moulded thigh troughs improve lower-extremity positioning. Flex Hinge allows the base to flex when a Modifiable Wedge is placed underneath.

2. Air Foam Flotation Cushion

Designed for pelvic obliquities and other asymmetrical conditions, exclusive Air-Foam Flotation cushion contains two self-inflating, independently-adjustable chambers.

ProForm NX is also available in a single chamber configuration. Independent research has shown Varilite's Air-Foam Flotation to be the #1 in vibration dampening (RESNA 2000)

"I like the ProForm NX cushion because it has more stability than my previous air-cell cushion. It is comfortable and I like the air and foam combination. With more positioning options that are available with the ProForm NX, I feel that my comfort level and stability have increased. ~ Erik Ferguson



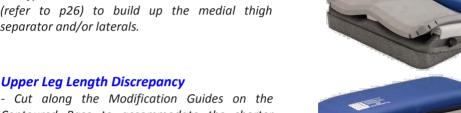
Modification Guidelines for professionals in seating and positioning

Designed for people requiring greater positioning support and/or cushion modifications. Examples of common modifications:



Symmetrical Posture

Modify the Contoured Base with Cheat Sheets (refer to p26) to build up the medial thigh separator and/or laterals.



- Cut along the Modification Guides on the Contoured Base to accommodate the shorter femur.
- Cut the Modifiable Thigh Cushion and Modifiable Wedge to conform to the Contoured Base.
- Cinch Cover (see steps 4-6).



- Cut the Contoured Base to accommodate any pelvic rotation.
- Cut away the existing medial thigh separator.
- Create a new medial thigh separator using Cheat Sheets (p26).
- Cut Modifiable Thigh Cushion and Modifiable Wedge as needed to conform to the Contoured Base.
- Cinch Cover (see steps 4-6)



- Cut Contoured Base and Modifiable Thigh *Cushion up the middle*
- Cut and place Modifiable Wedge under unaffected leg.







The above provides an example of the wide array of postural needs which the ProForm NX may be modified to cater for; other examples include (for more information please contact your local distributor):

- **Pelvic Obliquities**
- **C-Shaped Postures**
- Existing Reddened Skin

- Cerebral Vascular Accident (CVA)
- Above Knee Amputation (AKA)
- **Unilateral Scooter**

Why Select the ProForm NX Cushion?

Seating specialists choose the ProForm NX cushion because it can be modified in an adaptive or subtractive manner. For example, it can provide additional medial or lateral thigh support by building up areas of the Contoured Base with Varilite Cheat Sheets accessory pads. The ProForm NX cushion can also be modified by cutting the Contoured Base, Modifiable Thigh Cushion and Modifiable Wedge to address leg length discrepancies.

Modifying Components

- Modify Contoured Base with a blade or 4. 1. electric knife.
- Cut Modifiable Wedge with a blade 5. 2. or electric knife.
- 3. Cut Modifiable Thigh Cushion with a blade or electric knife. Use scored 6. lines on bottom for dimensional reference.

Use care when cutting with a blade or knife. Do not cut the blue air-foam cushions.

Cinching the Cover

- Fold provided hook material in half so that you have hook on both sides
 - Place hook material on loop at front, bottom edge of cushion on side of modification
 - Pull firmly on cover and fold it back on itself and attach hook to appropriate loop.













ProForm NX Dual-Chambered Cushion (Complete including cover)

	12x14 (30x35cm)	14x14 (35x35cm)		15x15 (38x38cm)			16x18 (40x45cm)	16x20 (40x50cm)
Mesh Cover	72412	74412	74612	75512	75712	76612	76812	76012
Incontinence Cover	72422	74422	74622	75522	75722	76622	76822	76022
	17x17 (43x43cm)	18x16 (45x40cm)	18x18 (45x45cm)		20x16 (50x40cm)	20x18 (50x45cm)	20x20 (50x50cm)	
Mesh Cover	77712	78612	78812	78012	70612	70812	70012	
Incontinence Cover	77722	78622	78822	78022	70622	70822	70022	

Spare and Replacement Parts

DONT FORGET A SPARE COVER

For added longevity and for use during washing of other cover

	12x14 (30x35cm)	14x14 (35x35cm)	14x16 (35x40cm)	15x15 (38x38cm)	15x17 (38x43cm)	16x16 (40x40cm)	16x18 (40x45cm)	16x20 (40x50cm)
Mesh Cover	01760	01761	01762	01740	01741	01763	01764	01765
Incontinence Cover	01750	01751	01752	01745	01746	01753	01754	01755
Softbase	01650	01651	01652	01645	01646	01653	01654	01655
Thigh Cushion	01660	01661	01662	01655	01656	01663	01664	01665
Dual Cushion	01770	01771	01772	01795	01796	01774	01775	01773
Wedge	04352	04355	04355	04574	04574	04357	04357	04357
	17x17 (43x43cm)	18x16 (45x40cm)	18x18 (45x45cm)	18x20 (45x50cm)	20x16 (50x40cm)	20x18 (50x45cm)	20x20 (50x50cm)	
Mesh Cover	01742	01766	01767	01768	01743	01744	01769	
Incontinence Cover	01747	01756	01757	01758	01748	01749	01759	
Softbase	01647	01656	01657	01658	01648	01649	01659	
Thigh Cushion	01657	01666	01667	01667	01658	01659	01669	
Dual Cushion	01797	01777	01778	01776	01798	01799	01779	
Wedge	04377	04358	04358	04358	04359	04359	04359	





Therapists recommend the Evolution for individuals with motor and neurological dysfunction caused by spinal-cord injury, stroke, multiple sclerosis, cerebral palsy and traumatic brain injury. Therapists value the Evolution's outstanding pressure distribution and postural support. Ultra-lightweight, comfortable and easy to use- no pumps, no kneading- the Evolution offers a hassle free, high quality seating solution.

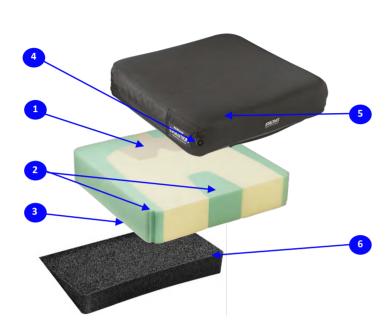
The cushion of choice for wheelchair users with a high risk of tissue breakdown and symmetrical positioning needs



Evolution is available with the following options:

Cover: Mesh or Incontinence Valve: Standard or PSV

Accessories: Wave Positioning Bases (refer to p19)



1. Air-Foam Flotation

The functional areas of the cushion are created by three types of foam; soft foam under the decubitus-sensitive area of the ITs; medium foam for the thigh trough, pelvic bucketing and pre-ischial bar; and firm foam to provide support through the perimeter and medial thigh separator.

The foam within the Evolution is bonded to the coating fabric to allow the cushion to hold air, air is released through an easily accessible valve allowing the user to be immersed in the foam. Varilite's air-foam flotation conforms to the user, distributing the user's weight over the entire surface of the cushion.

Independent research has shown Varilite's Air-Foam Flotation to be the #1 in impact and vibration dampening (RESNA 2000).

2. Positioning Supports

Positioning supports improve stability, which is important for users with compromised sitting balance or who transfer frequently. Multi-stiffness foam provides support as the user is immersed in the cushion. Medial and lateral supports minimise internal and external lower extremity rotation. Pelvic bucketing and pre-ischial ridge help maintain pelvic position, and thigh troughs promote a natural femoral position.

3. Four-way-stretch Fabric

A four-way-stretch, water resistant, knit fabric is bonded to the foam of the Evolution cushion providing maximum comfort during immersion.

4. Valve for Adjusting Air Volume

The Evolution PSV uses Varilite's revolutionary new, patented Pressure Setting Valve. Sitting on a fully inflated cushion, the user, or caregiver, opens the PSV to a pre-set position. When the PSV senses that the desired level of immersion has been achieved, it stops releasing air, then with a simple turn of the valve the user closes the PSV.

The Evolution is also available with a traditional two-way Varilite valve. Sitting on a fully inflated cushion, the user opens the valve and releases air, closing the valve when sitting on approximately 13mm of air and foam.

5. Cover

The Evolution comes complete with either a mesh or incontinence cover made from a breathable four-way-stretch fabric. Air exchange and further pressure distribution is promoted by reticulated foam inside the cover. A rugged nonslip material is used on the underside with hook and loop attachments offering greater security. The Evolution cover is machine washable, tumble dryable and meets ISO 7176-16 ignition resistance standards for upholstered wheelchair components.

6. Wedge

A modifiable closed-cell foam wedge is available with each Evolution, to assist pressure redistribution from the sensitive ITs onto the thighs.



"Since using the Varilite Evolution I sit with great balance, posture and positioning. It is a very comfortable product to use and I have never had any issues with skin break down. I would absolutely recommend Varilite products to other wheelchair users because personally, I have had a very positive experience with Varilite products for 18 years."

~ Erick Bryant



Varilite's PSV (Pressure Setting Valve) takes the guesswork out of cushion adjustment and makes it automatic!

The PSV works by sensing the amount of internal cushion pressure. As air is released, internal pressure decreases and the user becomes immersed in the cushion for effective pressure distribution (Fig. 1).

The PSV is marked with three pre-set positions which provide the best range of immersion for most users. The therapist determines the PSV position that results in optimal pressure distribution for a client (The PSV can be marked in a different position by a therapist if the user falls outside the pre-determined range).

Sitting on a fully inflated Evolution PSV, the client simply opens the PSV to the appropriate position. When the PSV senses that enough air has been released it automatically shuts off the flow. The client closes the PSV with a simple turn of the valve. Adjustment is simple and consistent.

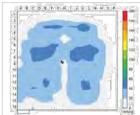
As a general rule, the PSV setting is set to a one (1) for a person with significant bony prominences and a three (3) for a well covered rear.

Ease of use improves user compliance. A therapist can select the Evolution PSV with confidence, knowing that a client or caregiver can adjust the Evolution PSV easily for optimal pressure distribution. **The first time. Every Time.**

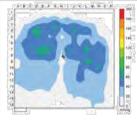


Varilite Standard Wedge used in conjunction with the Evolution

Our Varilite Standard Wedge reduces the seat to back angle which increases the weight-bearing load on the back of the thighs and decreases the load on the buttocks. The 5cm (2") tapered wedge trims easily for custom fitting to meet individual needs.



FSA Pressure Mapping
with Wedge



FSA Pressure Mapping without Wedge



Fig.1 - Immersion

As air is released from the cushion, the user becomes immersed in the foam. The Different foams conform to the user's shape. As immersion increases, the load is distributed over more of the cushion's surface area and pressure points are reduced. Optimal pressure distribution is achieved when the load is distributed over the largest surface area.

"Since I have been using the Evolution PSV cushion, I can tell how much my balance has been improved. The Evolution PSV cushion can improve the independence of quadriplegics because it improved my transfers, stability, and helps avoid skin issues. The cushion doesn't make me all wobbly, like the air-celled cushion I used to have."



~ Jeremy Hannaford

Evolution	(Compl	lete incl	luding	cover)	
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	12x14 (30x35cm)	14x14 (35x35cm)	14x16 (35x40cm)	14x18 (35x45cm)	14x20 (35x50cm)	15x15 (38x38cm)	15x17 (38x43cm)	16x14 (40x35cm)	16x16 (40x40cm)
Mesh Cover	72410	74410	74610	74810	74010	75510	75710	76410	76610
Incontinence Cover	72420	74420	74620	74820	74020	75520	75720	76420	76620
	16x18 (40x45cm)	16x20 (40x50cm)	17x17 (43x43cm)	18x16 (45x40cm)	18x18 (45x45cm)	18x20 (45x50cm)	20x16 (50x40cm)	20x18 (50x45cm)	20x20 (50x50cm)
Mesh Cover	76810	76010	77710	78610	78810	78010	70610	70810	70010
Incontinence Cover	76820	76020	77720	78620	78820	78020	70620	70820	70020
	22x18 (55x45cm)	22x20 (55x50cm)	24x18 (60x45cm)	24x20 (60x50cm)					
Mesh Cover	7281B	7201B	7481B	7401B					
Incontinence Cover	7282B	7202B	7482B	7402B					

Evolution PSV (Complete including cover)

	12x14 (30x35cm)	14x14 (35x35cm)	14x16 (35x40cm)	14x18 (35x45cm)	14x20 (35x50cm)	15x15 (38x38cm)	15x17 (38x43cm)	16x14 (40x35cm)	16x16 (40x40cm)
Mesh Cover	72415	74415	74615	74816	74016	75515	75715	76415	76615
Incontinence Cover	72425	74425	74625	74826	74026	75525	75725	76425	76625
	16x18 (40x45cm)	16x20 (40x50cm)	17x17 (43x43cm)	18x16 (45x40cm)	18x18 (45x45cm)	18x20 (45x50cm)	20x16 (50x40cm)	20x18 (50x45cm)	20x20 (50x50cm)
Mesh Cover	76815	76015	77715	78615	78815	78015	70615	70815	70015
Incontinence Cover	76825	76025	77725	78625	78825	78025	70625	70825	70025
	22x18 (55x45cm)	22x20 (55x50cm)	24x18 (60x45cm)	24x20 (60x50cm)					
Mesh Cover	72815	72015	74815	74015					
Incontinence Cover	72825	72025	74825	74025					

Evolution and Evolution Wave Spare Covers

Incontinence

Standard and CPW Wave

LPB and CPB Wave

DONT FORGET A SPARE COVERFor added longevity and for use during washing of other cover

12x14 14x14 14x16 14x18 14x20 15x15 15x17 16x14 16x16 16x18 16x20 (30x35cm) (35x35cm) (35x40cm) (35x45cm) (35x50cm) (38x38cm) (38x43cm) (40x35cm) (40x40cm) (40x45cm) (40x50cm) Mesh Standard and CPW Wave LPB and CPB Wave Incontinence Standard and CPW Wave LPB and CPB Wave 17x17 18x16 18x18 18x20 20x16 20x18 20x20 22x18 22x20 24x18 24x20 (43x43cm) (45x40cm) (45x45cm) (45x50cm) (50x40cm) (50x45cm) (50x50cm) (55x55cm) (55x50cm) (60x45cm) Mesh Standard and CPW Wave LPB and CPB Wave





Offering superior pressure distribution and a high level of postural support the dual-chambered Meridian provides a lightweight, comfortable and easy to use seating solution for clients with motor and neurological dysfunction due to spinal cord injury, stroke, traumatic brain injury, cerebral palsy and multiple sclerosis.

Therapists value the superior skin protection offered by the Meridian, the integral pre-ischial ridge and wedge effect created by the Meridian's dual chambers.

A dual chambered seating solution for wheelchair users with high risk of tissue breakdown and symmetrical positioning needs

Users and caregivers value its low weight, comfort and ease of use. No pumps or accessories. No kneading or manipulation.



Meridian is available with the following options:

Cover: Mesh or Incontinence

Valve: Standard

Accessories: Wave Positioning Bases (refer to p19)

1. Air-Foam Flotation

The functional areas of the cushion are created by three types of foam; soft foam under the decubitus-sensitive area of the ITs; medium foam for the thigh trough, pelvic bucketing and pre-ischial bar; and firm foam to provide support through the perimeter and medial thigh separator.

The foam within the Meridian is bonded to the coating fabric to allow the cushion to hold air, air is released through easily accessible valves allowing the user to be immersed in the foam. Varilite's air-foam flotation conforms to the user, distributing the user's weight over the entire surface of the cushion.

Independent research has shown Varilite's Air-Foam Flotation to be the #1 in impact and vibration dampening (RESNA 2000).

2. Dual Chambers

The dual-chamber design of the Meridian allows for independent positioning of the thighs and pelvis.

Adjustments are quick, easy and can be performed with the client seated. The front-to-back air chambers of the Meridian prevent sacral seating and promote good posture. The pre-ischial shelf created by the dual-chambers prevent the ITs from sliding forward, thus preventing a posterior pelvic tilt and sacral seating. The squeeze created by the separate air chambers provides postural support by 'holding' the client in place.

3. Four-way-stretch Fabric

A four-way-stretch, water resistant, knit fabric is bonded to the foam of the Meridian cushion providing maximum comfort during immersion.







4. Valves for Adjusting Air Volume

Easy to use, two-way, air valves allow simple and efficient adjustment. Once the client is seated on the fully inflated cushion the, right valve can be released allowing air to escape from the pelvic chamber. With a simple twist of the valve the air chamber can be closed when the client is sitting on

 $approximately\ 13mm\ of\ air\ and\ foam.$

Once proper immersion of the pelvis has been achieved the user releases air from the front/thigh chamber by opening the left valve. Once optimum load on the thighs has been achieved the valve is closed.

5. Cover

The Meridian comes complete with either a mesh or incontinence cover made from a breathable four-way-stretch fabric. Air exchange and further pressure distribution is promoted by reticulated foam inside the cover. A rugged nonslip material is used on the underside with hook and loop attachments offering greater security. The Meridian cover is machine washable, tumble dryable and meets ISO 7176-16 ignition resistance standards for upholstered wheelchair components.

Sacral Seating Meridian Reduces Sacral Seating

"I was happy when I heard about Varilite, and was able to try out a new type of cushion. For years, I used a gel cushion, and it was always so heavy to lift. I now have the Varilite Meridian cushion, and I love it because it is so lightweight. Also, when I am at work and sitting for long periods of time I can

adjust the air in the cushion. Recently, I have noticed that I am having less pain in my legs."

~ Danijela Beckwith



Meridian (Complete including cover)

	12x14 (30x35cm)	14x14 (35x35cm)	14x16 (35x40cm)	14x18 (35x45cm)	14x20 (35x50cm)	15x15 (38x38cm)	15x17 (38x43cm)	16x14 (40x35cm)	16x16 (40x40cm)
Mesh Cover	72430	74430	74630	74830	74030	75530	75730	76430	76630
Incontinence Cover	72440	74440	74640	74840	74040	75540	75740	76440	76640
	16x18 (40x45cm)	16x20 (40x50cm)	17x17 (43x43cm)	18x16 (45x40cm)	18x18 (45x45cm)	18x20 (45x50cm)	20x16 (50x40cm)	20x18 (50x45cm)	20x20 (50x50cm)
Mesh Cover	76830	76030	77730	78630	78830	78030	70630	70830	70030
Incontinence Cover Bariatric Sizes	76840	76040	77740	78640	78840	78040	70640	70840	70040
	22x18 (55x45cm)	22x20 (55x50cm)	24x18 (60x45cm)	24x20 (60x50cm)					
Mesh Cover	7283B	7203B	7483B	7403B					
Incontinence Cover	7284B	7204B	7484B	7404B					
Maridian and M	Aaridia.	14/41/4	Cnara	Covers	DO	IT EODG	ET A CD	ADE COL	/ED

Meridian and Meridian Wave Spare Covers

DONT FORGET A SPARE COVER

				Fo	r added longev	ity and for use	during washin <u>c</u>	g of other cover	
	12x14 (30x35cm)	14x14 (35x35cm)	14x16 (35x40cm)	14x18 (35x45cm)	14x20 (35x50cm)	15x15 (38x38cm)	15x17 (38x43cm)	16x14 (40x35cm)	16x16 (40x40cm)
Mesh									
Standard and CPW Wave	02517	02518	02519	02619	02620	02621	02622	02623	02520
LPB and CPB Wave	02585	02586	02587	02639	02640	02641	02642	02643	02588
Incontinence									
Standard and CPW Wave	02534	02535	02536	02624	02625	02626	02627	02628	02537
LPB and CPB Wave	02602	02603	02604	02644	02645	02646	02647	02648	02605
	16x18 (40x45cm)	16x20 (40x50cm)	17x17 (43x43cm)	18x16 (45x40cm)	18x18 (45x45cm)	18x20 (45x50cm)	20x16 (50x40cm)	20x18 (50x45cm)	20x20 (50x50cm)
Mesh									
Standard and CPW Wave	02521	02522	02523	02524	02525	02526	02527	02528	02529
LPB and CPB Wave	02589	02590	02591	02592	02593	02594	02595	02596	02597
Incontinence									
Standard and CPW Wave	02538	02539	02540	02541	02542	02543	02544	02545	02546
LPB and CPB Wave Bariatric Sizes	02606	02607	02608	02609	02610	02611	02612	02613	02614
	22x18 (55x45cm)	22x20 (55x50cm)	24x18 (60x45cm)	24x20 (60x50cm)					
Mesh									
Standard and CPW Wave	02530	02531	02532	02533					
LPB and CPB Wave	02598	02599	02600	02601					
Incontinence									
Standard and CPW Wave	02547	02548	02549	02550					
LPB and CPB Wave	02615	02616	02617	02618					

The Wave Series

For use in conjunction with Meridian and Evolution Cushions



- Lateral thigh support to control thigh abduction
- Medial Thigh support to control thigh adduction
- Posterior pelvic support to offload pressure from ischials

LPB

- Lateral pelvic support in centre of seat
- Lateral thigh support to control thigh abduction
- Solid base of support for postural stability

- Posterior pelvic support to offload pressure from ischials
- Lateral pelvic support in centre of seat
- Lateral thigh support to control thigh abduction
- Medial thigh support to control thigh adduction
- Solid base of support for postural stability

Varilite Wave Positioning Support Comparison Chart

CPW

	Lateral Pelvic Support	Posterior Pelvic Support	Lateral Thigh Support	Medial Thigh Support	Firm Bas of Support
Contoured Positioning Wedge (CPW)			1	Y	
Lateral Positioning Base (LPB)	1		1		1
Contoured Positioning Base (CPB)	Y	Y	Y	V	Y

Each Wave positioning support fits securely beneath the Meridian or Evolution cushion **inside** the tailored Meridian or Evolution Wave Cover. Further adjustments can be made using Cheat Sheets and/or cut aways (see examples in ProForm NX section pp10-11).

Meridian, Evolution and Evolution PSV Wave Bases (for covers see pp15&18)

	12x14 (30x35cm)	14x14 (35x35cm)	14x16 (35x40cm)	14x18 (35x45cm)	14x20 (35x50cm)	15x15 (38x38cm)	15x17 (38x43cm)	16x14 (40x35cm)	16x16 (40x40cm)	16x18 (40x45cm)	16x20 (40x50cm)
Contoured Positioning Wedge (CPW)	05410	05411	05412	05400	05401	05402	05403	05404	05413	05414	05415
Lateral Positioning Base (LPB)	05427	05428	05429	05405	05406	05407	05408	05409	05430	05431	05432
Contoured Positioning Base (CPB)	05444	05445	05446	05461	05462	05463	05464	05465	05447	05448	05449
	17x17 (43x43cm)	18x16 (45x40cm)	18x18 (45x45cm)	18x20 (45x50cm)	20x16 (50x40cm)	20x18 (50x45cm)	20x20 (50x50cm)	22x18 (55x45cm)	22x20 (55x50cm)	24x18 (60x45cm)	24x20 (60x50cm)
Contoured Positioning Wedge (CPW)	05416	05417	05418	05419	05420	05421	05422	05423	05424	05425	05426
Lateral Positioning Base (LPB)	05433	05434	05435	05436	05437	05438	05439	05440	05441	05442	05443
Contoured Positioning Base (CPB)	05450	05451	05452	05453	05454	05455	05456	05465	05447	05459	05460

Evolution and Meridian Wave Series

Meridian and Evolution Wave CPW (Contoured Positioning Wedge)

Meridian and Evolution Wave CPW provide exceptional positioning of the lower extremities for enhanced sitting posture.



1. Wave Contoured Positioning Wedge

Lateral Thigh supports position the lower extremities and control abduction of the thighs. Medial thigh support provides the correct amount of abduction and controls the adduction of the thighs. The Wave CPW increases the weight bearing load on the lower surface of the thighs and decreases the load on the buttocks, without changing the seat-to-back angle. The closed-cell foam CPW will not absorb fluid and is resistant to bacteria. The Wave CPW can also be used in conjunction with a Standard Wedge for increased thigh support.

- 2. Air-Foam Flotation Cushion
- 3. Cover

Meridian and Evolution Wave LPB (Lateral Positioning Base)

Meridian and Evolution Wave LPB provide a solid base of support and a high degree of pelvic and lower extremity lateral positioning.



1. Wave Lateral Positioning Base

Posterior pelvic supports help to keep the pelvis positioned in the anterior-posterior line and transfers pressure from the ischial tuberosities to the gluteal tissues. Lateral pelvic supports, located under the trochanters, provide lateral stability that maintains the pelvis in the centre of the seat. Lateral thigh supports position the lower extremities and control abduction of the lower thighs. The Wave LPB provides a firm foundation for postural stability and discourages chair upholstery from slinging. The closed-cell foam LBP will not absorb fluid and is resistant to bacteria. The Wave LPB can also be used in conjunction with a Standard Wedge for increased thigh support.

- 2. Air-Foam Flotation Cushion
- 3. Cover

Meridian and Evolution Wave CPB (Contoured Positioning Base)

Meridian and Evolution Wave CPB provide a solid base of support and a high degree of pelvic and lower extremity lateral and medial positioning.



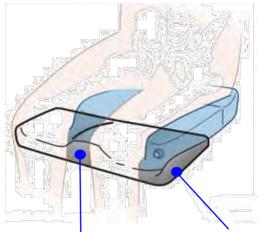
1. Wave Contoured Positioning Base

Posterior pelvic support helps to keep the pelvis positioned in the anterior-posterior line and transfers pressure from the ischial tuberosities to gluteal tissues. Lateral pelvic supports, located under the trochanters, provide lateral stability that maintains the pelvis in the centre of the seat. Lateral thigh supports position the lower extremities and control abduction of the thighs. Medial thigh support provides the correct amount of abduction and controls adduction of the thighs. The Wave CPB provides a firm foundation for postural stability and discourages chair upholstery from slinging. The closed-cell foam CPB will not absorb fluid and is resistant to bacteria. The Wave CPB can also be used in conjunction with a Standard Wedge for increased thigh support.

- 2. Air-Foam Flotation Cushion
- 3. Cover

Each Wave design enhances the Multi-Stiffness Foam of the Meridian and Evolution

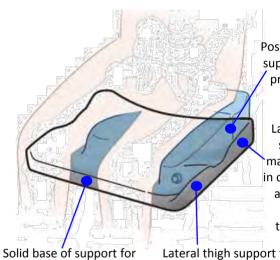




Medial thigh support to control adduction

Lateral thigh support to control abduction



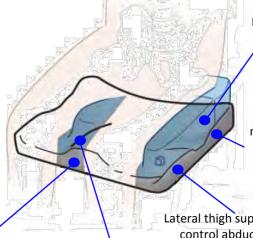


Posterior pelvic support taking pressure off ischials

Lateral pelvic support to maintain pelvis in centre of seat and support greater trochanters

Lateral thigh support to control abduction





Posterior pelvic support taking pressure off ischials

Lateral pelvic support to maintain pelvis in centre of seat and support greater trochanters

Lateral thigh support to control abduction

Solid base of support for Medial thigh support to postural stability control thigh adduction

postural stability





Therapists recommend the Zoid PSV for individuals who need a low profile, tapered cushion without a medial thigh separator. Athletes value its lightweight design and vibration impact dampening.

On the court...On the track...On the trail...



The performance cushion of choice for active wheelchair users at moderate risk of tissue breakdown

Tapered design, low profile, stability, comfort and simplicity have made the Zoid PSV the preferred performance cushion for active wheelchair users. With a height of only 6cm (2.5"), an 18"x18" Zoid weights less than 900g!



"Since I often get really busy during the day I sometimes forget to do my pressure lifts, but luckily with the Zoid PSV cushion I get great pressure distribution. The Zoid PSV cushion gives me the protection I need to avoid skin breakdown".

~ Bryan King

Zoid PSV is available with the following options:

Cover: Mesh or Incontinence

1. Air-Foam Flotation

Functional areas of the cushion are created by three types of foam: soft foam for the decubitus-sensitive area of the ITs; medium foam for main seat support area; and firm foam for the perimeter.

Bonding Zoid foam to the coating fabric allows the Cushion to hold air. Air-foam flotation combines the best properties of air and foam to offer superior skin protection. The air supports the load, while the foam keeps the air where it is needed and provides stability. The foam conforms to the user, and the user's weight is distributed over the surface of the cushion.

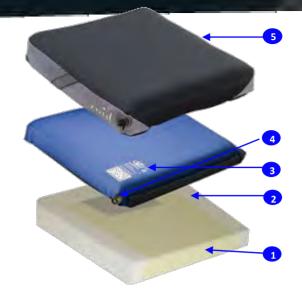
Independent research has shown Varilite's Air-Foam Flotation to be the #1 in impact and vibration dampening (RESNA 2000).

2. Positioning Supports

Extra-firm, bevelled foam increases lateral stability and sitting balance, while a large ischial pan protects the pelvis in both anterior and posterior pelvic tilt positions. There is no medial thigh separator, therefore lower extremities can drift naturally into midline for better fit in a tapered chair.

3. Two-way stretch Fabric

Two types of fabric are bonded to Zoid PSV foam: two-way stretch knit on top for maximum conformity and nylon fabric on the bottom for added strength and durability. Fabrics are puncture and water resistant.



4. Valve for Adjusting Air Volume

Zoid PSV uses Varilite's revolutionary Pressure Setting Valve, sitting on a fully inflated cushion, the user, or caregiver, opens the PSV to a pre-set position. When the PSV senses that the desired level of immersion has been achieved, it stops releasing air and the user closes the PSV.

5. Cover

Stylish and functional. Available in mesh and incontinence. The machine washable cover wraps around the front edge to eliminate seams. Reticulated foam underneath promotes air and water vapour exchange and improves pressure distribution. The underside of the cushion is a rugged nonslip material with hook and loop for added security. Zoid PSV covers meet ISO 7176-16 ignition resistance standards for upholstered wheelchair components.

Zoid PSV (Complete including cover)

	12x8 (30x20cm)	12x12 (30x30cm)	12x14 (30x35cm)	14x14 (35x35cm)	14x16 (35x40cm)	14x18 (35x45cm)	15x15 (38x38cm)	15x17 (38x43cm)	16x16 (40x40cm)
Mesh Cover	32800	32200	32400	34400	34600	34800	35500	35700	36600
Incontinence Cover	32810	32210	32410	34410	34610	34810	35510	35710	36610
	16x18 (40x45cm)	16x20 (40x50cm)	17x17 (43x43cm)	18x16 (45x40cm)	18x18 (45x45cm)	18x20 (45x50cm	20x16 (50x40cm)	20x18 (50x45cm)	20x20 (50x50cm)
Mesh Cover	36800	36000	37700	38300	38800	38000	30600	30800	30000
Incontinence Cover	36810	36010	37710	38310	38810	38010	30610	30810	30010

Zoid Spare Covers

DONT FORGET A SPARE COVER

For added longevity and for use during washing of other cover

	12x8	12x12	12x14	14x14	14x16	14x18	15x15	15x17	16x16
	(30x20cm)	(30x30cm)	(30x35cm)	(35x35cm)	(35x40cm)	(35x45cm)	(38x38cm)	(38x43cm)	(40x40cm)
Mesh Cover	04651	04652	04653	04654	04655	04697	04698	04699	04656
Incontinence Cover	04702	04711	04712	04715	04719	04720	04721	04722	04725
	16x18	16x20	17x17	18x16	18x18	18x20	20x16	20x18	20x20
	(40x45cm)	(40x50cm)	(43x43cm)	(45x40cm)	(45x45cm)	(45x50cm	(50x40cm)	(50x45cm)	(50x50cm)
Mesh Cover	04659	04847	04888	04571	04657	04572	04573	04514	04532
Incontinence Cover	04726	04727	04728	04729	04730	04731	04741	04781	04785





Recommended for clients who are at moderate risk of skin breakdown. Therapists value the Reflex because it never needs manual adjustment. A fixed amount of immersion conforms to a client's body, providing pressure distribution, comfort and stability. The Reflex is ideal for nursing homes, hospitals and other clinical environments where an effective, low maintenance skin protection wheelchair cushion is required.

The self-adjusting cushion of choice for wheelchair users with a risk of tissue breakdown



Users and caregivers value the simplicity and ease of use of the Reflex. The ultra-lightweight design of the Reflex helps conserve energy expenditure for clients who manually propel.

Reflex — performs after extended use

The Reflex shows consistent pressure distribution after rigorous life cycle testing. Comparison pressure testing shows that the Reflex performs as well after extended use as it does when new.





1. Air-Foam Flotation

Reflex foam is perforated in the sacral-ischial area for maximum protection of the decubitus-sensitive area of the ITs. Additionally, the Reflex provides medium density foam for the thigh trough, pelvic bucketing and pre-ischial bar, and firm foam to provide support through the perimeter and medial thigh separator.

Bonding Reflex foam to the coated fabric allows the cushion to hold air. Air-foam flotation combines the best properties of air and foam to offer superior skin protection. The air supports the load, while the foam keeps the air where it is needed and provides stability. The foam conforms to the user, and the user's weight is distributed over the surface of the cushion.

Independent research has shown Varilite's Air-Foam Flotation to be the #1 in impact and vibration dampening (RESNA 2000).

2. Fabric

Reflex foam is bonded to puncture and water resistant polyester fabric for strength and durability.



3. Air-Release Device

A built-in air-release device (patent pending) automatically releases a portion of air when the user sits on the cushion. The air-release device allows a fixed amount of immersion and prevents bottoming out. When weight is taken of the cushion, it automatically reinflates.

4. Cover

The Reflex features a tailored, removable, incontinence cover. The underside is a rugged nonslip material with hook and loop for added security. The cover is machine washable.

Reflex (Complete including cover)

	12x12 (30x30cm)	12x14 (30x35cm)		14x16 (35x40cm)					16x14 (40x35cm)
Incontinence Cover	73522	73524	73544	73546	73548	73540	73555	73557	73564
	16x16 (40x40cm)	16x18 (40x45cm)		17x17 (43x43cm)				20x16 (50x40cm)	
Incontinence Cover	73566	73568	73560	73577	73586	73588	73580	73506	73508

Reflex Spare Covers

DONT FORGET A SPARE COVER

For added longevity and for use during washing of other cover

	12x12 (30x30cm)		14x14 (35x35cm)	14x16 (35x40cm)		14x20 (35x50cm)			16x14 (40x35cm)
Incontinence Cover	05534	05535	05536	05537	05538	05539	05540	05541	05542
	16x16 (40x40cm)	16x18 (40x45cm)	16x20 (40x50cm)	17x17 (43x43cm)		18x18 (45x45cm)	18x20 (45x50cm	20x16 (50x40cm)	20x18 (50x45cm
Incontinence Cover	05543	05544	05545	05546	05547	05548	05549	05550	05551



"The Reflex cushion has reduced my lower back pain, my posture has significantly improved and overall I am very pleased with an effective seating support that far exceeds a generic foam cushion; I also love that the Reflex cushion reinflates itself! It feels like I am sitting on a new cushion every time I transfer back into my wheelchair.".

~ Meg Paulsen

Cheat Sheets 02102

Varilite Cheat Sheets are adhesive-backed sheets of closed-cell foam. Each package contains four pieces of foam measuring 25cmx25cm (10"x10"). Cheat Sheets can be cut with a blade or scissors and applied to a variety of surfaces. Simply cut the desired shape, remove adhesive backing and apply the Cheat Sheet to a clean, dry surface. Layer as needed and round off corners and edges. Once desired shape has been achieved, apply a final, smooth layer.

Suggested Cheat Sheet Applications

A popular use for cheat sheets is customizing a Varilite ProForm NX contoured base. Cheat Sheets are used to build up the medial thigh separator and laterals, smooth cut edges and improve contact for superior pressure distribution.



Other Cheat Sheet Uses:

- Build contours on planar systems
- Modify back systems for kyphotic posture
- Pad or contour head supports, laterals, hip quides, ASIS bars, arm supports etc
- Smooth sharp edges on wheelchairs or accessories.



Drop Base (Hardware Kit 04351)

The Varilite Drop Base is essential for wheelchair users who need to sit lower for self-propelling or transferring. The Varilite Drop Base is made from durable and lightweight 1cm (3/8") PVC. Our L-J Brackets are hardened steel for superior strength and durability. The hardware allows 10cm (4") of height adjustment and 15 degrees of angle adjustment. Fingerlocks secure the Drop Base to the wheelchair and allow for quick removal. Varilite Drop Bases fit wheelchairs that are 33-50cm (13"-20") wide, with seat rail diameters of 2.2cm or 2.5cm (7/8" or 1").

Solid Inserts

The Varilite Solid Insert counters the effects of sling upholstery. For some wheelchairs users, sling upholstery promotes internal rotation of the lower extremities, sacral seating, posterior pelvic tilt, loss of natural lumbar lordosis and obliquity of the pelvis. Such poor positioning can result in discomfort and long-term problems. A solid insert offers an easy and cost effective solution to the problems of sling seating.

The Varilite Solid Insert is made from durable 6mm (1/4") plywood and is available in paediatric through adult sizes. It can be placed between the cushion and upholstery, or, preferably, inside the cushion cover. With rounded edges and a smooth, sanded surface, there is no risk of splintering or puncturing the cushion. All Varilite cushion covers are sewn with room for a Solid Insert.



Drop Base

Size	14x16 (35x40cm)		16x18 (40x45cm)			20x20 (50x50cm)
Part Number	04388	04288	04308	04278	04378	04258
Fits Chair Width:			15"-16"			

Solid Insert

12x12 (30x30cm)	12x14 (30x35cm)	14x14 (35x35cm)	14x16 (35x40cm)	14x18 (35x50cm)	14x20 (35x45cm)	15x15 (37x37cm)	15x17 (37x43cm)	16x16 (40x40cm)
04360	04390	04260	04380	04535	04536	04537	04538	04280
16x18 (40x45cm)	16x20 (40x50cm)	17x17 (43x43cm)	18x16 (45x40cm)	18x18 (45x45cm)	18x20 (45x50cm)	20x16 (50x40cm)	20x18 (50x45cm)	20x20 (50x50cm)
04300	04290	04389	04300	04370	04240	04290	04240	04250

Secondary Supports



Chest Harness

The Varilite Contoured Chest Harness is designed for an anatomically optimal fit. Its contoured shape and moulded channels allow the pads to curve, especially around the breast tissue and other natural contours. Pads are constructed from low-slip, laminated, closed-cell foam, edge-bonded for durability and comfort, with a dynamic positioning strap that gives the user the option of a static or dynamic harness. Dynamic movement is beneficial during functional activities such as reaching, or for clients with spasticity.

A chest harness should always be used in conjunction with a hip belt and always requires a solid back system. The Varilite Contoured Chest Harness includes camlocks and tri-end hardware for attachment to the wheelchair. Camlocks secure top webbing to the solid back system. Varilite Contoured Chest Harness are available in Paediatric through Adult sizes.

The Varilite chest harness has a **Dynamic Positioning Strap** at the top of the pad that allows dynamic movement. An elastic strap is threaded through a tri-glide in combination with the static top webbing. When the webbing is pulled tightly through the tri-glide, the elastic component is eliminated, providing a static effect (Fig. 1). When threaded loosely, the dynamic component is engaged allowing the user freedom of movement (Fig. 2).

Fig. 1 - Dynamic Strap in static mode.



Fig. 2 - Dynamic Strap in stretch mode.

Chest Harness

Part #	Description	Buckle	Webbing	Pad Dimension
87115	Contoured chest harness, Extra Small	Side Squeeze and Shoulder Cam	19mm	220x38mm
87215	Contoured chest harness, Small	Side Squeeze and Shoulder Cam	25mm	350x45mm
87315	Contoured chest harness, Medium	Side Squeeze and Shoulder Cam	25mm	400x45mm
87415	Contoured chest harness, Large	Side Squeeze and Shoulder Cam	25mm	460x45mm

Chest Belt

A chest belt is placed across the chest, just under the armpits, to provide mild upper torso support. **Never place a chest belt across the abdomen.**

The Varilite Chest Belt can also be used as a thigh belt to assist in lower extremity positioning. A thigh belt should not be used without a hip belt unless the client has good pelvic control.



Chest Belt– D-ring for limited hand adjustment. Right or left hand adjustment.

Chest Belt

Part #	Description	Buckle	Closure	Webbing	Length
88027	Chest Belt	None; Single Pull	Hook & Loop	50mm	1460mm

Repair Kit for all Varilite Cushions

Cushion Repair Kit: 03663 Standard Valve Repair Kit: 03681 PSV Valve Repair Kit: 03682

Note: Repair services are available from Healthcare Innovations Australia Pty Ltd. Contact us for further details.



Secondary Supports



An ankle-positioning device assists more than lower extremity positioning. **Ankle-positioning enhances** *full body positioning.* Band-It ankle-positioning devices are ideal for individuals with poor lower extremity control, spasticity, impaired sensation, eversion/inversion malalignments, body-scheme deficits and heel cord shortening.

The Varilite Band-It is made with soft, closed-cell, foam covered in knit fabric, edged with a nylon binding. The front closure is a high-strength, moulded, side-squeeze buckle. The Band-It attaches to the footplate of a wheelchair.

Varilite Band-It has a **Dynamic Positioning Strap**. Dynamic positioning allows freedom of ankle movement, which prevents joint stiffening. If the client has increased extensor tone, the dynamic component keeps the foot in place while maintaining flexion at the ankle.

Dynamic positioning is achieved by adjusting the length of the webbing within the tension lock. For a dynamic effect, the webbing is left loose (Fig. 1), while a static effect can be achieved if the webbing is pulled taut through the tension lock.

Size Selection

The Band-It is designed to secure around the ankle, with the body of the device extending over the top of the client's shoes to distribute pressure over a larger area. It is important that shoes and socks are worn during Band-It use. Measure the circumference of the ankle, two finger widths above the malleoli (Fig. 3). When measuring, the client should be wearing shoes, socks and applicable orthoses.

Mounting

To allow for greater range of motion at the ankle, place the mounting hardware away from the foot; for less motion mount the hardware closer to the sides of the foot (Fig.4). Hardware placement should be determined in collaboration with a therapist or other qualified healthcare provider. As with all positioning devices, perform regular skin checks to monitor the skin condition and promptly inform the client's healthcare provider of any redness or open areas.



Fig. 1 - Band-It in Dynamic Mode

Fig. 2 - Band-It in Static Mode

Fig. 3 -Measuring Ankle

Fig. 4 -Hardware placement options



Band-It pair, including mounting kit

Part #	Description	Buckle	Webbing	Fits Circumference of:
89003	Ankle Support, Extra Small	Side Squeeze, Single Pull	19mm	10-15cm
89000	Ankle Support, Small	Side Squeeze, Single Pull	25mm	15-23cm
89001	Ankle Support, Medium	Side Squeeze, Single Pull	25mm	23-28cm
89002	Ankle Support, Large	Side Squeeze, Single Pull	25mm	28-33cm

2-Point Hip Belts- Front Pull

Part #	Description	Buckle	Webbing	Pad Dimension	Length
83012	2 point, Padded Hip Belt, Extra Small	Metal Side Squeeze, Single Pull	25mm	100x38mm	1210mm
83112	2 point, Padded Hip Belt, Small	Metal Side Squeeze, Single Pull	25mm	150x38mm	1270mm
83212	2 point, Padded Hip Belt, Medium	Push Button, Single Pull	38mm	220x63mm	1520mm
83312	2 point, Padded Hip Belt, Large	Push Button Single Pull	38mm	270x63mm	1520mm
84212	2 point, Padded Hip Belt, Medium	Plastic Side Squeeze, Dual Pull	38mm	220x63mm	1520mm
84312	2 point, Padded Hip Belt, Large	Plastic Side Squeeze, Dual Pull	38mm	270x63mm	1520mm
85012	2 point, Padded Hip Belt, Extra Small	Plastic Side Squeeze, Single Pull	25mm	100x38mm	1210mm
85112	2 point, Padded Hip Belt, Small	Plastic Side Squeeze, Single Pull	25mm	150x38mm	1270mm
81022	2-Point, Unpadded Hip Belt, Medium	Aircraft Latch, Single Pull	50mm	None	1520mm
82022	2-Point, Unpadded Hip Belt, Large	Push Button Single Pull	50mm	None	1520mm

Varilite 2-Point Hip Belts

The Varilite 2-Point Hip Belt attaches at two points, with padding placed relative to the ASIS (anterior superior iliac spine) to provide pelvic support or stability. Attach in front of the greater trochanters to the side wheelchair canes to promote anterior pelvic tilt.

The Varilite 2-Point Hip Belts are available with a choice of buckle and pull types. Pads are made with soft closed-cell foam covered with breathable knit fabric.



The Varilite 4-Point Hip Belt provides four directions of pull and is appropriate when the client has moderate to sever positioning needs, such as pelvic rotation and windswept deformities.

A 4-point hip belt is better suited than a 2-point hip belt to decrease anterior pelvic tilt. Place the padded portion of hip belt across the ASIS and attach the belt to the back canes or to a solid back several inches above the back-to-seat junction. Use the secondary straps to stop the belt from rising into soft tissue by fastening these to the horizontal seat bars



Metal to Metal, Side Squeeze, Single Pull -Metal-to-metal side squeeze buckles require more pressure to release than a push button buckle.



Moulded, Side Squeeze, Dual Reverse Pull -Adjustment is made by pulling two D-rings on either side of the buckle towards the user's midline.



Unpadded, Metal to Metal, Aircraft Latch, Single Front Pull - Mechanism is ideal for clients with limited hand function.



4-Point, Metal to Metal, Push Button, Front Single Pull - Adjustment is made by pulling a single D-ring away from the user's midline



Metal to Metal, Push Button, Single Pull -Adjustment is made by pulling a single D-ring away from the user's midline.



Moulded, Side Squeeze, Dual Front Pull -Adjustment is made by pulling two D-rings on either side of the buckle away from the user's midline.

Cleaning

Varilite Secondary Supports are all machine washable. Remove all attachment hardware. Place the hip belt, chest harness or Band-It in a large sock or pillowcase to prevent damage. Air dry.

2-Point Hip Belts- Reverse Pull

Part #	Description	Buckle	Webbing	Pad Dimension	Length
83016	2 point, Padded Hip Belt, Extra Small	Metal Side Squeeze, Reverse Pull	25mm	100x38mm	1210mm
83116	2 point, Padded Hip Belt, Small	Metal Side Squeeze, Reverse Pull	25mm	150x38mm	1270mm
83216	2 point, Padded Hip Belt, Medium	Push Button, Reverse Pull	38mm	220x63mm	1520mm
83316	2 point, Padded Hip Belt, Large	Push Button, Reverse Pull	38mm	270x63mm	1520mm
85016	2 point, Padded Hip Belt, Extra Small	Plastic Side Squeeze, Reverse Pull	25mm	100x38mm	1210mm
85116	2 point, Padded Hip Belt, Small	Plastic Side Squeeze Reverse Pull	25mm	150x38mm	1270mm

4-Point Hip Belts

Part #	Description	Buckle	Webbing	Pad Dimension	Length
83214	4-Point, Padded Hip Belt, Medium	Push Button, Single Pull	38mm	220x63mm	1520mm
83314	4-Point, Padded Hip Belt, Large	Push Button, Single Pull	38mm	270x63mm	1520mm
84214	4-Point, Padded Hip Belt, Medium	Plastic Side Squeeze, Dual Pull	38mm	220x63mm	1520mm
84314	4-Point, Padded Hip Belt, Large	Plastic Side Squeeze, Dual Pull	38mm	270x63mm	1520mm
85014	4-Point, Padded Hip Belt, Extra Small	Metal Side Squeeze, Single Pull	25mm	100x38mm	1210mm
85114	4-Point, Padded Hip Belt, Small	Metal Side Squeeze, Single Pull	25mm	150x38mm	1270mm

Evaluation of Varilite Wheelchair Cushions

An independent study carried out by the Centre for Disability Research and Innovation, Institute of Orthopaedics and Musculo-Skeletal Science, YCL, Stanmore, Middlesex XA7 4LP

Cushions from the Evolution, Solo and Stratus ranges of Varilite Cushions were tested using a simulated backside (a Skeletal Embedded Loading Indentor (Fig. 1)) to characterise interface pressure distributions following the protocols set out in the original Committee Draft of ISO-16840-2 (Wheelchair Seating (Part 2: Test methods for devices intended to manage tissue integrity - Seat Cushions) in 2001. The cushions were measured when new and then following a repetitive load test of 200'000 cycles, which has been designed to simulate fatigue from a lifetime of use.

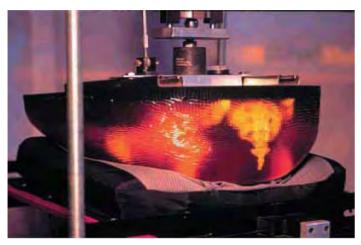


Figure 1 - Skeletal Loading Indentor

The data from the Varilite cushions were compared with the results obtained from 3" thick blocks of HR45 and HR70 high resilience foam. Foam is widely used in many low cost cushions and is usually effective for pressure care in the short term. Foam however has a tendency to develop a 'set' and break down within a short number of months. Any cushion that 'performs' better than new foam therefore has obvious advantages.

Cushion Characteristics

For a cushion to be effective, it should spread the user's weight over as large an area as possible (the larger the surface area of the cushion that is in contact with the user the better) - this spread of contact area equates with **envelopment** of the user's buttocks and thighs.

A second important characteristic is the cushion's ability to take pressure away from bony prominences, such as the ischial tuberosities, sacrum, and greater trochanters - referred to as **dispersion** (the lower the value the better the dispersion).

The next consideration is how effective the cushion is at reducing **maximum pressure** (the lower the better) and how evenly the pressure is distributed.

Results

Envelopment

The data presented in Figure 2, below, shows that all three of the tested Varilite cushions provided up to twice as much envelopment as the high resilience comparison foams; this characteristic changed little with fatiguing. The 'higher' grade the cushion, the better the envelopment, i.e. The Evolution performed better than the Solo which outperformed the Stratus.

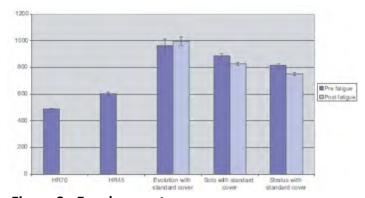


Figure 2 - Envelopment

Dispersion

The data presented in Figure 3, below, show that all three tested Varilite cushions better dispersed pressure away from the bony prominences than the high resilience comparison foams. Again, the 'higher' grade the cushion the better the dispersion.

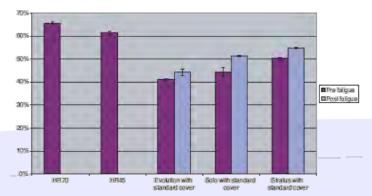


Figure 3 - Dispersion

Maximum Pressure

As shown in Figure 4, below, the maximum pressure readings underneath the test 'backside' were up to twice as high for the high resilience comparison foams than they were on the three tested Varilite cushions. The higher the 'grade' of the cushion, the lower the maximum pressure.

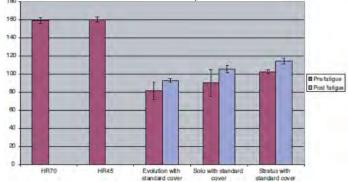


Figure 2 - Maximum Pressure

Peak Pressure Index (PPI)

This is a measure of how evenly pressures are distributed across the whole cushion. Figure 5, below, shows that all three of the tested Varilite cushions performed up to twice as well as the high resilience comparison foams. Before fatiguing, the 'higher' grade the cushion, the better the outcome. After fatiguing, all three Varilite cushions performed similarly to each other; however the fatigued Varilite cushions performed significantly better than the unfatigued high resilience comparison foams.

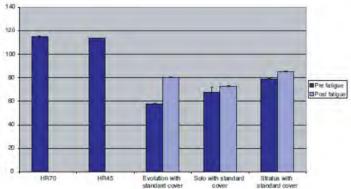


Figure 4 - Peak Pressure Index

Overview

These independent tests show that Varilite cushions provide significantly superior pressure care characteristics when compared with high resilience foam and that increasingly good results are obtained when one moves from the Stratus to the Solo to the Evolution cushion.

The published summary of this work was presented to the 7th EPUAP meeting in Tampere, Finland in 2003 (Nicholson et al 2004). Materials from the full report can also be obtained from Healthcare Innovations Australia.

Reference

Nicholson, G., Bain, D. & Ferguson-Pell, M. (2004), 'Practical experience in using draft ISO (CD 16840-2) test methods for Wheelchair Seating - Part 2: Test methods for devices intended to manage tissue integrity', EPUAP Review, Vol. 6, No. 1.

"Analysis of Vibration and Comparison of Four Wheelchair Cushions during Manual Wheelchair Propulsion"

Abstract

The purpose of this study was to compare four cushions, a Jay Active, (JA), a PinDot Comfort-Mate (PDCM), a Roho Low Profile (RLP) and a Varilite Solo (VS), based on their ability to minimise the vibrations transmitted from the wheelchair to the individual during manual wheelchair propulsion (MWP). Accelerometers measured the vibrations at the wheelchair/cushion interface and at the individual's head as the individual traversed an obstacle course. The VS performed the best, followed by the PCDM, the RLP and finally the JA, suggesting that a combination of foam and air minimises the transmission of vibration. Cushions designed for static pressure relief may not perform well in other areas potentially related to secondary injuries such as vibration.

DiGiovine, C.P., Cooper, R. A., Wolf, E.J., Hosfield, J. & Corfman, T., 'Analysis of Vibration and Comparison of Four Wheelchair Cushions During Manual Wheelchair Propulsion Proc', *RESNA*, 200, pp429-431.



Selecting Lateral Supports

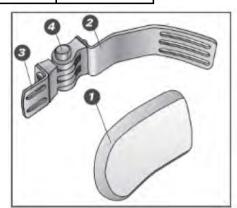
Follow the four steps for optimal Lateral Support Selection

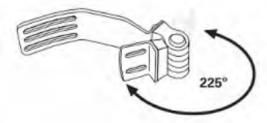
1. Select either a PAL Swing-Away or a Fixed Lateral Support **PAL Swing-Away Lateral Support**

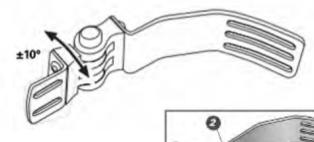
The Varilite PAL Swing-Away Thoracic supports are designed to complement the Icon Mid and Icon Tall Backs. PAL (Positive Action Lateral) supports allow hinge angle, pad rotation and horizontal pad adjustments for a precise fit. All PAL Swing-Away Lateral Supports include a neoprene cover that attaches easily to the PAL push button hinge for protection.

PAL Swing-Away Lateral Supports	Part Number
Hinge Mechanism (Cover included)	04374









Fixed Lateral Support

Fixed Lateral Supports are available for situations when a swing-away lateral is not required. Fixed Lateral Supports consist of a shell bracket, pad bracket and pad.

1. Pad:

Pads are available in contoured or linear styles in three sizes. They are made of closed-cell foam with a steel insert that allows for horizontal pad adjustment. The pad foam is protected 1/8" thick. with a removable, machine washable cover.

2. Shell Bracket:

Constructed of steel. the shell bracket is contoured to mount bracket attaches on the inside of a Varilite Icon Mid Back or Tall Back bracket is less than

3. Pad Bracket:

Constructed of steel for strength, the pad securely to the pad. Easy adjustment allows +/- 10° of Shell. The low profile vertical pad rotation. Pad brackets are available in short, long and offset sizes.

4. Push-Button Hinge:

An easily activated push-button unlocks the PAL Swing-Away hinge mechanism. Positive Locking Action indicated when high is securely locked. Easy hinge angle adjustment provides up to 225° of swing.

2. Select the Pad Bracket

PAL Swing-Away Lateral Support

Pad brackets for the PAL Swing-Away Lateral Supports are available in the styles listed below;

- Short Horizontal Pad Adjustment: 2.5cm (1")
- Long Horizontal Pad Adjustment: 5.7cm (2.2")
- Short Horizontal Pad Adjustment: with 2cm Offset 2.5cm (1")

PAL Swing-Away Lateral Support

Pad brackets for the Fixed Lateral Supports are available as;

Long - Horizontal Pad Adjustment: 5.7cm (2.2")

3. Match Lateral Support to your Back System

Once the Pad Bracket style has been selected, match this bracket with the size of the back system on the table below. For example if you required a Short Pad Bracket and your Varilite Back was a 18" (45cm) you require part number 89030. Only one product code is required for both the Pad Bracket and the Shell Bracket.

Pad Bracket	Short	Long	Short with 2cm Offset
Fits Icon Mid and Tall Back Systems Sizes	PAL Swing	Away Latera	l Supports
12" (30cm)	89050	89150	89250
14" (35cm)- 15"(38cm)	89010	89110	89210
16" (40cm)- 17" (43cm)	89020	89120	89220
18" (45cm)	89030	89130	89230
20" (50cm)- 24" (60cm)	89040	89140	89240

Pad Bracket	Long			
Fits Icon Mid and Tall Back Systems Sizes	Fixed Lateral Supports			
12" (30cm)	88050			
14" (35cm)- 15"(38cm)	88010			
16" (40cm)- 17" (43cm)	88020			
18" (45cm)	88030			
20" (50cm)- 24" (60cm)	88040			

4. Select Type and Size of Pad

Contoured Pads							
Dimensions W x L Part Numbe							
3" (8cm) x 4" (10cm)	04317						
4" (10cm) x 5" (13cm)	04319						
5" (13cm) x 6" (15cm)	04321						

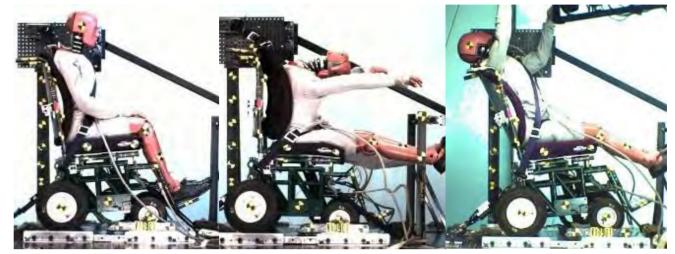
Linear Pads							
Dimensions W x L	Part Number						
3" (8cm) x 4" (10cm)	04307						
4" (10cm) x 5" (13cm)	04309						
5" (13cm) x 6" (15cm)	04311						

Note: Lateral Supports can be mounted onto the Icon Back using the slots provided on the shell. Alternatively, the aluminium shell may be drilled to mount lateral supports and other secondary supports including, but not limited to, head supports, harnesses and belts without voiding warrantee.

Safety

Crashworthiness

Varilite supports industry safety initiatives. The Icon Back Systems have been dynamically tested for safe use in motor vehicles by an independent transportation centre. The Icon Tall Back and Icon Deep Back have been tested and conform with ISO 16840-4 for the safe use of seating devices for use in motor vehicles when used with a wheelchair base that complies with the performance requirements of ISO 7176-19.



Note: The heights of the Icon Low Back and the Icon Mid Back do not offer proper head support for safe use in motor vehicles, due to this these models have not been dynamically tested and should therefore not be used for transport in motor vehicles.

Safety Latches

Icon Back System latches open outward to prevent unintentional activation by contact with backpacks or other items. Red safety markings alert the user or caregiver that a latch is open. Icon latches lock and securely when the back support is inserted.



Resistance to Flammability

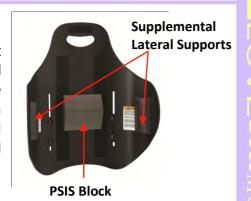
Flammability testing has been performed on the Icon Back System cushions and covers by an independent laboratory according to the requirements of ISO 7176-16 standard for resistance to ignition of wheelchair-upholstered parts. The ISO standard specifies methods of testing to assess the resistance of the cover and cushion to ignition by cigarette or match. The standard specifies requirements that progressive smouldering ignition and flaming resistance shall not occur. Icon Back System cushions and covers meet the ISO 7176-16 standard.



Accessories

Optional Additions

Users who need extra support in order to maintain correct positioning can utilise the PSIS Block or Supplemental Lateral Supports attached to the shell of their Icon Back System. These supports are integrated into the shell of the Icon Deep Back and can be moved to the desired position within the shell using provided hook and loop attachments. The PSIS Block and Supplemental Lateral Supports can be added as accessories to any Varilite back system.



PSIS Block (Part No. 04249)

The PSIS (Posterior Superior Iliac Spine) block provides support to the sacrum at the PSIS level, promoting neutral pelvic tilt and spinal extension.

Supplemental Lateral Supports (Part No. 04266)

The Supplemental Lateral Supports provide additional support where desired when placed inside the Icon Back Shell. The Supplemental Lateral Pads help users who lean to one side maintain an upright position and are especially beneficial for older clients

Cushions and Covers

Users needing a backup cushion or cover can purchase the washable spacer knit fabric cover and the air-foam cushion separately from the back system. Covers can be purchased as a single item, or with the cushion. Cushion are covered by limited two year warrantee.

Icon Low Back		Icon Mid Back			Icon Tall Back			Icon Deep Back			
C:	Cushion Cove	Cover	C:	Cushion	Cover	Size (in)	Cushion	Cover	Size (in)	Cushion	Cover
Size (in)	Item No.	Item No.	Size (in)	Item No.	Item No.		Item No.	Item No.		Item No.	Item No.
14	07140	07168	12	07146	07174	12	07155	07183	14	07162	07190
15	07141	07169	14	07147	07175	14	07156	07184	15	07163	07191
16	07142	07170	15	07148	07176	15	07157	07185	16	07164	07192
17	07143	07171	16	07149	07177	16	07158	07186	17	07165	07193
18	04144	07172	17	07150	07178	17	07159	07187	18	07166	07194
20	07145	07173	18	07151	07179	18	07160	07188	20	07167	07195
	-		20	07152	07180	20	07161	07189		-	
			22	07153	07181				•		
			24	07154	07182						

Modesty Kits (Part No. 04584-04586)

Users needing extra coverage between the back support and wheelchair seat can purchase a modesty kit that attaches to the shell of the back system and the seat of the wheelchair. Modesty kits provide draft exclusion for the user, while appearing integrated into the back support.

Mounting Kit (Part No. 07197)

Cane clamp mounting hardware including holster and shims for easy transfer of the back system to alternate wheelchairs

Complete Hardware Kit (Part No. 07198)

Including holster, shell bracket and shims

Full thoracic coverage for moderate to maximum support

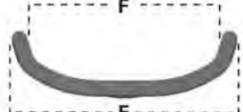


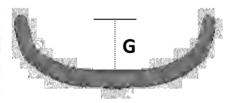
The Icon Tall Back is well suited to those needing additional support, or those using a tilt and recline system.

The Icon Tall Back supports the back to the top of the shoulders, including the scapulae, which is ideal for users with decreased trunk control. The curved shell provides mild lateral support. Lateral supports (pp16-17) can be easily mounted using the existing vertical shell slots. Head rests can be installed onto the aluminium shell for more positioning options.

The Icon Tall Back and the Icon Deep Back systems have met the requirements of the ISO 16840-4 Crashworthiness test.



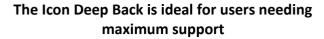




Icon Low Back Size Inch		30	35	38	40	43	45	50
		12	14	15	16	17	18	20
Part number	22121	22141	22151	22161	22171	22181	22201	
A. Back Height cm		37	43	46	49	52	55	60
		14.6	17.0	18.2	19.4	20.5	21.75	32.6
B. Bottom of back to beginning of vertical slot	cm	5	6	6	8	8	9	9
	Inch	2.0	2.5	2.5	3.0	3.0	3.5	3.5
C. Bottom of back to top of vertical slot	cm	23	24	27	28	28	29	29
	Inch	9.0	9.5	10.5	11.0	11.0	11.5	11.5
D. Range of Icon hardware adjustment in vertical slot	cm	9	9	11	11	11	11	11
	Inch	3.5	3.5	4.5	4.5	4.5	4.5	4.5
E. Outside width of shell	cm	24	29	31	34	37	39	44
	Inch	9.5	11.4	12.4	13.4	14.6	15.4	17.4
F. Width of support surface	cm	24	29	31	34	37	39	44
	Inch	9.5	11.4	12.4	12.6	14.6	15.4	17.4
G. Contour depth	cm	7.6	7.6	7.6	7.6	7.6	7.6	7.6
	Inch	3	3	3	3	3	3	3
Fits wheelchair widths	cm	30-33	33-38	35-40	38-43	40-45	43-48	48-53
	Inch	12-13	13-15	14-16	15-17	16-18	17-19	19-21

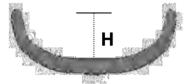
Icon Deep Back

Full thoracic coverage and deep lateral support



The Icon Deep Back supports a user's back to the top of the shoulder, including the scapulae, with extra lateral support of the thoracic trunk. The deep contour of the back provides more lateral support for users with poor trunk control. Head supports and other secondary supports can be installed onto the aluminium shell. The Icon Deep Back includes a closed-cell foam PSIS (Posterior Superior Iliac Spine) block and Supplemental Lateral Pads that attach to the shell under the cushion with adhesive hook and loop attachments. The PSIS block provides support to the pelvis at the PSIS level, promoting anterior pelvic tilt and spinal extension. The Supplemental Lateral Pads help to create a customized fit.





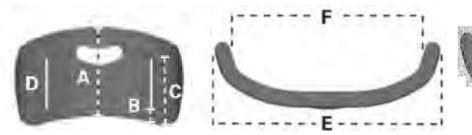
Icon Low Back Size	cm	35	38	40	43	45	50
	Inch	14	15	16	17	18	20
Part number		22141	22151	22161	22171	22181	22201
A. Back Height	cm	43	46	49	52	55	60
	Inch	17.0	18.2	19.4	20.5	21.75	32.6
B. Bottom of back to beginning of vertical slot	cm	6	6	8	8	9	9
	Inch	2.5	2.5	3.0	3.0	3.5	3.5
C. Bottom of back to top of vertical slot	cm	24	27	28	28	29	29
	Inch	9.5	10.5	11.0	11.0	11.5	11.5
D. Range of Icon hardware adjustment in vertical slot	cm	9	11	11	11	11	11
	Inch	3.5	4.5	4.5	4.5	4.5	4.5
E. Outside width of shell	cm	32	36	39	41	44	50
	Inch	12.6	14.3	15.3	16.3	17.4	19.6
F. Width of support surface	cm	30	34	37	39	42	48
	Inch	11.8	13.5	14.5	15.5	16.6	18.8
G. Height of fixed lateral support	cm	29	32	35	36	38	41
	Inch	11.6	12.6	13.6	14.3	15.0	16.2
H. Contour depth	cm	15.2	15.2	15.2	15.2	15.2	15.2
	Inch	6.0	6.0	6.0	6.0	6.0	6.0
Fits wheelchair widths	cm	33-38	35-40	38-43	40-45	43-48	48-53
	Inch	13-15	14-16	15-17	16-18	17-19	19-21

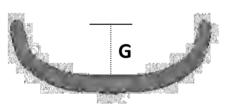
Pelvic and lumbar support for a user with good trunk control



The Icon Low Back combines the Icon hardware features with a sleek, low profile look.

The Icon Low back is an ideal lightweight solution for users needing lower trunk support and the full adjustment normally only found in a larger style of back support. The upper body is unimpeded, which allows full range of motion of the upper body and trunk for daily living activities. The shell curves around the sides of the body providing mild lateral support, while the enhanced rollover cushion protects the user providing security and maximum comfort.





Icon Low Back Size	cm	35	38	40	43	45	50
	Inch	14	15	16	17	18	20
Part number		32141	32151	32161	32171	32181	32201
A. Back Height	cm	18	20	21	22	23	24
	Inch	7.25	7.7	8.25	8.7	9.1	9.5
B. Bottom of back to beginning of vertical slot	cm	4	4	4	4	4	4
	Inch	1.5	1.5	1.5	1.5	1.5	1.5
C. Bottom of back to top of vertical slot	cm	14	14	14	14	15	15
	Inch	5.5	5.5	5.5	5.5	6.0	6.0
D. Range of Icon hardware adjustment in vertical slot	cm	1	1	1	1	2	2
	Inch	0.5	0.5	0.5	0.5	1.0	1.0
E. Outside width of shell	cm	29	31	34	37	39	44
	Inch	11.4	12.4	13.4	14.4	15.4	17.4
F. Width of support surface	cm	27	29	32	35	37	42
	Inch	10.6	11.6	12.6	13.6	14.6	16.6
G. Contour depth	cm	7.6	7.6	7.6	7.6	7.6	7.6
	Inch	3	3	3	3	3	3
Fits wheelchair widths	cm	33-38	35-40	38-43	40-45	43-48	48-53
	Inch	13-15	14-16	15-17	16-18	17-19	19-21

Midthoracic support for a large range of body types

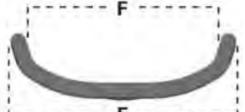


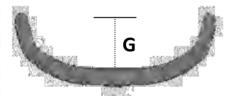
The Icon Mid Back provides support and positioning to improve trunk control and decrease fatigue.

The Icon Mid Back supports the user just below the scapulae so the back does not interfere with arm movement during propelling or other activities.

The Icon Mid Back shell provides mild lateral support. Secondary Supports (pp16-17) attach easily if more substantial lateral support is required. The back features an enhanced rollover cushion to protect the user providing security and maximum comfort.







Icon Low Back Size	cm	30	35	38	40	43	45	50	55	60
	Inch	12	14	15	16	17	18	20	22	24
Part number		12121	12141	12151	12161	12171	12181	12201	12221	12241
A. Back Height	cm	25	28	31	32	34	36	40	40	40
	Inch	10	11.2	12.4	12.8	13.6	14.4	16	16	16
B. Bottom of back to beginning of vertical slot	cm	3	4	4	4	4	4	4	4	4
	Inch	1.3	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
C. Bottom of back to top of vertical slot	cm	13	17	18	19	20	22	22	22	22
	Inch	5.3	6.5	7.0	7.5	8.0	8.5	8.5	8.5	8.5
D. Range of Icon hardware adjustment in vertical slot	cm Inch	1 0.5	4 1.5	5 2.0	6 2.5	8 3.0	9 3.5	9 3.5	9 3.5	9 3.5
E. Outside width of shell	cm	24	29	31	34	37	39	44	49	54
	Inch	9.5	11.4	12.4	13.4	14.4	15.4	17.4	19.4	21.4
F. Width of support surface	cm	22	27	29	32	35	37	42	47	52
	Inch	8.7	10.6	11.6	12.6	13.6	14.6	16.6	18.6	20.6
G. Contour depth	cm	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
	Inch	3	3	3	3	3	3	3	3	3
Fits wheelchair widths	cm	30-33	33-38	35-40	38-43	40-45	43-48	48-53	53-58	58-63
	Inch	12-13	13-15	14-16	15-17	16-18	17-19	19-21	21-23	23-25

Seat Depth

The Icon Back System provides excellent seat depth options, and allows for growth, by offering four different installation configurations. In the Basic Installation the Cane Brackets are in the rearward position and the Slide Brackets are in the forward position. Changing the back to fit positioning needs is as easy as reconfiguring the position of the Cane Brackets and Slide Brackets from the Basic Installation.

Extra Depth Installation

Basic Installation

Growth Installation

Extra Growth Installation







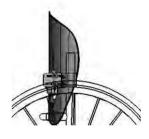


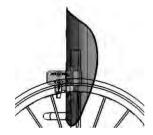
Cane Brackets: Rearward Position **Slide Brackets:** Rearward Position **Seat Depth:** + 1.5" (4cm) Depth from Basic Installation

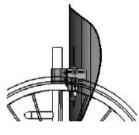
Cane Brackets: Rearward Position **Slide Brackets:** Forward Position Seat Depth: Up to 1.5" (4cm)

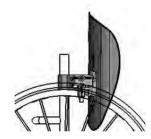
Cane Brackets: Forward Position **Slide Brackets: Rearward Position Seat Depth:** + 4" (10cm) Depth Reduction from Basic Installation

Cane Brackets: Forward Position Slide Brackets: **Forward Position** Seat Depth: + 5.5" (14cm) Depth Reduction from Basic Installation









Cane Brackets Forward



Slide Brackets Forward









Note: altering the depth will affect the centre of gravity of the wheelchair set up and therefore its propensity to tip over. It may also potentially improve or impair the efficiency of propulsion for a self-propelled chair.

Icon Back Selection Guide



	Icon Low Back	Icon Mid Back	Icon Tall Back	Icon Deep Back
Cushion Composition	Air-Foam Flotation	Air-Foam Flotation	Air-Foam Flotation	Air-Foam Flotation
Shell Composition	Aluminium	Aluminium	Aluminium	Aluminium
Hardware Composition	Metal	Metal	Metal	Metal
Cover Type	Spacer Knit	Spacer Knit	Spacer Knit	Spacer Knit
Enhanced Rollover Cover	\checkmark	\checkmark	\checkmark	✓
Valve Type	Standard	Standard	Standard	Standard
Back Angle Recline	20°	20°	20°	20°
Attachment Points	Two	Two	Two	Two
Lower Trunk Positioning	\checkmark	\checkmark	\checkmark	\checkmark
Upper Trunk Positioning			\checkmark	\checkmark
Lateral Trunk Positioning				\checkmark
Lateral Support Compatible		✓	\checkmark	
Weight (18"/45cm system) (includes all hardware)	1.5kg (3.4lbs)	1.9kg (4.3lbs)	2.5kg (5.5lbs)	2.9kg (6.4lbs)
Maximum User Weight	136kg (300lbs)	136kg (300lbs) 181kg (400lbs) (Bariatric Sizes)	136kg (300lbs)	136kg (300lbs)
Paediatric Sizes		\checkmark	\checkmark	
Bariatric Sizes		\checkmark		
Page				

Ease of Installation

Simplicity

The Icon Back System installs on a wheelchair quickly and easily. Only two parts need to be attached to the wheelchair—all other hardware components are pre-installed. All adjustment screws are the same; only a single tool is needed.

Icon hardware is symmetrical so there are no right-handed or left-handed components. Symmetrical hardware provides a wide range of seat depth adjustment, without any need for special, extra length parts. Posterior seat depth can be increased, or anterior depth decreased by simply reversing the hardware. Symmetrical hardware simplifies ordering and management of spare parts.



Installing Icon Back Hardware on Wheelchair Canes

Icon Back Hardware is sized to fit wheelchair canes 25mm in diameter. Shims are provided for wheelchair canes less than 25mm in diameter. Use the chart below to assist the selection of the appropriate sized shim to fit your cane diameter.

Cane Size	Shim Size	Included with Hardware?
25mm (1")	Not needed	-
22mm (7/8")	3.18mm	Yes
19mm (3/4")	6.35mm	Yes

Ease of Installation

Secure Adjustability

Adjusting the angle, width, height and depth of the Icon Back System hardware is simple and easy. All adjustment screws are accessible from the rear of the back support or from the outside of the Cane Brackets. Only one tool is needed and adjustments can be made while the user is in the wheelchair.

Once adjusted, the Icon hardware stays in place. Cane Brackets clamp securely and will not slip. The innovative Adjuster Plate mechanism for recline adjustment is positive locking to prevent the back support from moving during daily activities or under heavy loads.



Angle Adjustment

The Icon hardware allows for $\pm 20^{\circ}$ of adjustment to the angle of the back.

Back recline angle 340° Posterior



Back recline angle





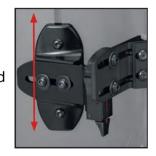
Width Adjustment



Lateral position adjustment is achieved by moving the Slide Brackets. The Slide Brackets adjust up to 1" (2.5cm) making it possible to install on wheelchairs 1" (2.5cm) wider or narrower than the width of the back support, or to position the Icon back off centre.

Height Adjustment

Moving the back up and down is as simple as loosening the Shell Brackets and sliding the back into position.



Depth Adjustment



Depth can be adjusted 1.5" (4cm) by moving the holster along the Cane Bracket. Depth adjustment options are also provided by the Slide Brackets and positioning of the Cane Bracket (please refer to p8 for details).

What makes the Icon Back the right back?

For many wheelchair users, a solid back system is essential for proper positioning. It supports the spine and positions the pelvis. Lateral supports of the back system help keep the user stable. The back system provides the mounting structure for headrests, thoracic supports, chest harnesses and hip belts. Pads, blocks, or other positioning accessories, can attach to the back to help accommodate kyphosis, scoliosis, abnormal tone and other conditions.

Proper position and postural support are essential for the health and well-being of wheelchair users. Respiration, digestion, swallowing and pain management all improve when the trunk is correctly supported. Allowing greater participation in activities of daily living, the right back system enhances the wheelchair user's overall comfort and their ability to interact socially.

Wheelchair sling upholstery is often inadequate for proper positioning and postural support. Selecting the right solid back system is one of the most important decisions to be made when completing the setup of the wheelchair.

For the user a good back system offers superior positioning and comfort. It should be easy to operate, adjust and remove, for the benefit of users who are on the go.

For the therapist a good back system provides a variety of types and sizes to choose from in order to accommodate individual seating needs. The design of the back also needs to consider safety in order to lower any possibility of injury. A full range of accessories provides more options allowing for individualization of the system.

For the technician a good back system is easy to install and adjust.

Built with the user, caregiver, clinician and technician in mind, the Icon Back System provides the best solution for those who demand comfort, simple operation and adjustment, as well as safety and crashworthiness (see p14). The Icon back System also offers a variety of back types and sizes, each with innovative adjustable hardware, plus a Varilite air-foam floatation cushion for superior comfort.

Superior Positioning, Comfort, Simplicity, Versatility and Safety. The Icon Back System delivers it all.

Wheelchair Back Systems....Without Compromise!



Comfort

Comfort is a user's first priority. The Icon Back System is designed to provide the most comfortable seating possible. The rollover cushion, air and dual-stiffness foam cushioning, and breathable fabric all combine to deliver enhanced comfort.

Rollover Cushion

The Icon Back System features an innovative rollover cushion to protect the user from contact with the edge of the shell during extension or weight shifting activities. The cushion is secured inside the cover so that it stays in place. Wheelchair users can perform their daily activities with confidence and in comfort.



Air and Dual-Stiffness Foam Cushion

The Icon Back System incorporates a Varilite air-foam flotation cushion. Sculpted foam fits the shell contour without bunching. Multi-stiffness foam is thickest along the vertebral column. Soft foam protects the sensitive areas of the spine while firmer foam supports the sides of the trunk. A two-way valve allows adjustment of air in and out of the cushion for a custom fit and adaptive comfort.



Breathable Fabric

The spacer knit fabric cushion cover increases air-flow between the user and the back support. Reticulated foam sewn under the spacer knit fabric provides additional air exchange, plus pressure distribution. The Icon Back System cover meets ISO 7176-16 ignition resistance standards for upholstered wheelchair components. The cover is machine washable.



Ease of Use



The Icon Back System is designed for users who are on the go. Operating the system is as easy as opening the latches and sliding the back support out of the hardware. Latches stay in an open position until the back is removed, making it simple to remove the support with one hand or for those with limited dexterity. The hardware guides the back support into position with minimal effort and locks it securely into place. Red safety markings alert the user that a latch is open and not in the locked position.

Accessibility

Additional supports can be added easily onto the Icon Back System. Vertical Slots can be used to attach Varilite PAL Swing Away Thoracic Supports (see p16), or other secondary supports. The slots also allow the installing technician to work around stabilizer bars, accessories or other obstructions when attaching Icon hardware to the wheelchair.







A back system has many functions; it enhances body function, it anchors hardware and secondary supports, it helps tissue management and it redistributes pressure.

We understand the importance of a back system in wheelchair positioning. Varilite have developed a complete line of back systems designed to meet a range of postural support needs.

Varilite: Back systems...WITHOUT COMPROMISE







Phone: 1300 499 282 Email: sales@hiaus.net.au Web: www.hiaus.net.au

Healthcare Innovations Australia Pty Ltd is the licensed distributor of Varilite products in Australia. As well as the range of Varilite seating systems, we also offer the following ranges;

- Varilite wheelchair back systems
- · FSA pressure mapping systems
- Shear Comfort Skin Care products
- Shear Comfort Foot Care products
- · Penco walker glides
- · See4safety mobility lights
- · Dynaspine wheelchair back systems
- BAM Biometric Sensors















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Varilite® Icon Back Systems Life is Calling

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