

# JAY J3 Cushion

The best just got better with Fluid and Air



# JAY Cushion Technology

JAY – Gold standard in seating and positioning

JAY® has long been accepted as the gold standard for effective seating and positioning. It is an established clinical leader worldwide for pressure redistribution and postural management for the wheelchair seated client.

## The JAY concept – How it works: Immersion, Envelopment, Redirection of Force

- The JAY® Fluid pad or air bladder contained within a firm base provides immersion of the 'at risk' bony prominences, hydrostatic loading and envelopment of the pelvis
- The pressure is redirected away from the ischial tuberosities and coccyx onto more load-tolerant structures, namely trochanters and femurs.
- These are supported on the pelvic loading area and the firm base

### The Result: Pressure Redistribution and Stability



## Building on a proven foundation the new JAY® J3 has been designed and engineered to incorporate increased knowledge in:

- Human physiology
- Science of materials  
(please refer to page 11 for additional information)
- Anthropometrics
- Design techniques
- Plus - invaluable feedback from clinicians, carers and end users

## The Result: the JAY 3 cushion

The modular seating system that features superior pressure redistribution, optimal postural stability, heat and moisture dissipation and comfort

### Modular approach

Build the cushion according to clinical needs and clients preference

- Customizeable base with three PLA sizes (Optiwell™ technology)
- Choice of Fluid and Air technology
- Two Fluid options (Factory Filled or Field Variable)
- Two Air options (single or dual valve)
- Positioning accessories



## A) JAY® J3 base

The JAY® J3 cushion is an excellent solution for the client at high to extreme risk of skin breakdown who requires lateral and forward/rearward postural stability. It is designed for clients who may have moderate to aggressive positioning needs or needs that change over time.

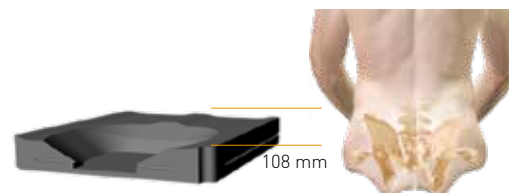
### 1: Two Depths – Standard and Deep

The JAY® J3 is available in either a deep or a standard profile. The deep version offers maximum immersion for the client at the highest level of skin risk who may have severe muscle atrophy and/or tissue integrity compromise. The standard version provides pressure redistribution and stability for the high risk client where muscle mass and tissue integrity are not as compromised.

**Standard: High skin risk client**



**Deep: Highest level of skin risk – requires maximum immersion due to significant muscle atrophy**



### 2: Sizes

- The JAY 3 cushion is available in a multitude of sizes ranging from 300 x 300 to 600 x 600 mm.
- All sizes have an increased user weight capacity to better serve the needs of the bariatric population
- Max user weight 300 mm - 480 mm = 150 kg
- Max user weight 500 mm - 600 mm = 227 kg

**Cushion Width**

Cushion Depth	mm	300	350	380	400	420	440	460	480	500	560	600
300												
350												
380												
400												
420												
440												
460												
480												
500												
560												
600												

[www.jay3seating.eu](http://www.jay3seating.eu)

for reference to the cushion dimension chart

Note: This information is for reference only. All prescriptions should be based on clinical assessment findings.

# JAY Optiwell™ Technology

## Optiwell™ Pelvic Loading Area (PLA)

### 1 Size

The PLA is sized to match the anthropometric measurements of the pelvis and is independent of the cushion width. The pelvis “fits” the well.

#### Relevance:

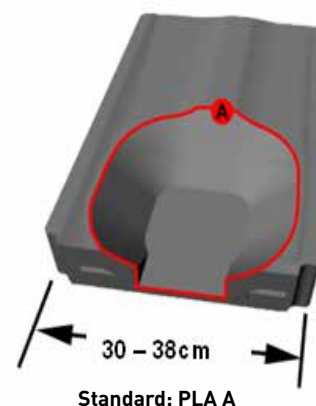
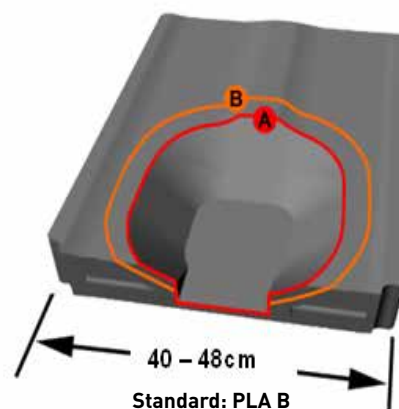
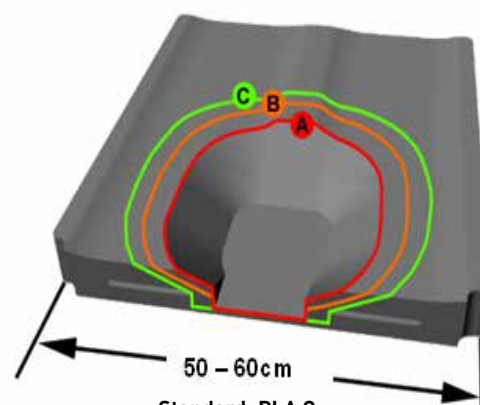
Ensures clinical goals of optimal pressure distribution and lateral stability. Optimal immersion of the ischials into the fluid or air is achieved and pressure is redirected to the femurs on the PLA and cushion base.

#### This effectively:

minimizes the risk of “bottoming out”  
minimizes risk of decreased lateral stability, pelvic obliquity and potential skin breakdown

#### How is this achieved?

Experience has indicated that the PLA size that is standard on the cushion is appropriate for the majority of users. There is an option to reduce the PLA size via PLA reducer ring if this clinically appropriate to optimize immersion, lateral stability and prevent bottoming out. Three PLA sizes are available. Variations are achieved using PLA reducer rings.



In this example the cushion ordered to fit the wheelchair has a size B PLA as standard but the client requires a size A PLA. This is achieved by inserting a B -> A PLA reducer ring.





## 2 Shape

The Optiwell™ slope is designed to redistribute the load from the ischials to the trochanters with the highest degree of anatomical alignment. This minimizes tension on the soft tissues between the bony prominences and optimises comfort.



**Stability**



**Pre-contouring**



# PLA Fluid Inserts



## C) Choice of Fluid or Air technology

The inserts are always sized to match the PLA size.

### 1 Factory Filled (FF)

Standard option, not field adjustable

Can be overfilled, underfilled or asymmetrically filled in the factory if required

FF standard option



### 2 Field Variable (FV)

Opportunity for in-field adjustment to

- Optimize fluid levels e.g. correct/ accommodate pelvic obliquity
- Accommodate changing needs

#### How is this achieved?

- Each FV fluid insert ships underfilled (20%)
- Each FV fluid insert has four strategically placed attachment points to velcro on the supplemental fluid pads
- Each FV insert ships with two Velcro-on supplemental pads
- Additional pads may be ordered – S, M, L, XL

#### Result

- Unique opportunity to achieve:
- Underfill, overfill, symmetrical or asymmetrical fill levels as desired
- Flexibility and versatility to meet the clinical need

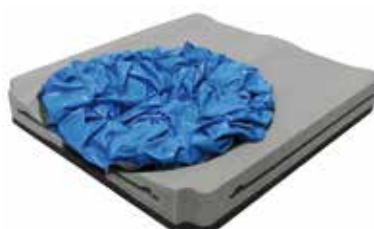
FV placement inserts



FF



FV



**JAY® Flow Fluid pads: Optimal choice when ease of use and minimal maintenance is priority**

# PLA Air Inserts

## Air Inserts

An additional choice for skin protection combined with all the benefits of the JAY® J3 base.

### 1 Single valve (AS)

- Opportunity for infield adjustment to optimize air levels for the stable, symmetrical pelvis

### 2 Dual valve (AD)

- Opportunity for infield adjustment to optimize air levels separately in each chamber e.g. correct / accommodate pelvic obliquity
- Accommodate changing needs

#### How is this achieved?

- Air volumes can be adjusted through the tubes using the hand inflation pump
- The tubes and valves are easily accessible at the side front of the cushion

The optimal choice when easy or ongoing adjustment is required or a lighter weight solution is desired.

Optimize peak pressures without sacrificing stability or positioning.

#### Note:

- Hand inflation pump and repair kit supplied with the cushion
- Air volumes should be checked daily - refer to owners manual for instructions



## Fluid Insert Redesign

- The fluid pad has been redesigned with the key clinical and practical goals in mind
- Significantly lighter
- Improved pressure redistribution
- Enhanced stability
- Ease of use i.e. minimal maintenance

This is achieved via new pleating geometry and increased segmentation of the fluid pad itself

## New Pleating Geometry

Provides increased immersion and envelopment of the pelvis by increasing surface contact area and accommodating the shape.



## Segmentation

Provides increased immersion and envelopment of the pelvis by decreasing surface tension of the fluid pad membrane.



**Together these design features minimize fluid migration thereby greatly enhancing both pressure distribution and stability.**





# Covers

## D) New Cover technology

### Universal Cover:

- One cover for each size which accommodates both the standard and deep cushion including positioning accessories.

### Comfort:

- Reticulated foam comfort layer within cover results in increased sitting tolerance. Comfort is critically important as discomfort can result in pain, fatigue, increased tone and equipment abandonment

### Tension Reduction:

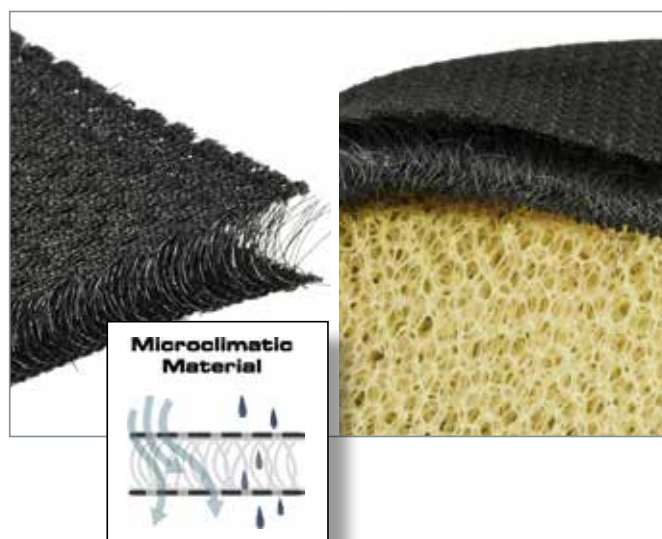
- Oversized cover reduces surface tension thereby allowing optimal immersion of pelvis into fluid pad or air insert



## Options

### 1 Microclimatic

- Standard and recommended
- 3DX™ spacer fabric helps dissipate heat and moisture away from the body – vitally important as heat and moisture build-up are known risk factors for skin breakdown
- Reticulated foam layer further vents heat and moisture



### 2 Incontinence

If ongoing incontinence is an issue an optional incontinence cover is available



Both covers can be machine washed at 60°, drip dry or tumble dry at low heat

# Positioning and base modifications

## E) Positioning

### 1) Base & Positioning Accessories

JAY® J3 offers excellent positioning capabilities via the very stable, non-porous closed cell foam base and the addition of a variety of positioning components to create deeper contours. The deeper contours provide stability and positioning but also increase contact area for added pressure distribution. The accessories are firmly attached via re-usable PSA tape. This adhesive becomes permanent when heated.

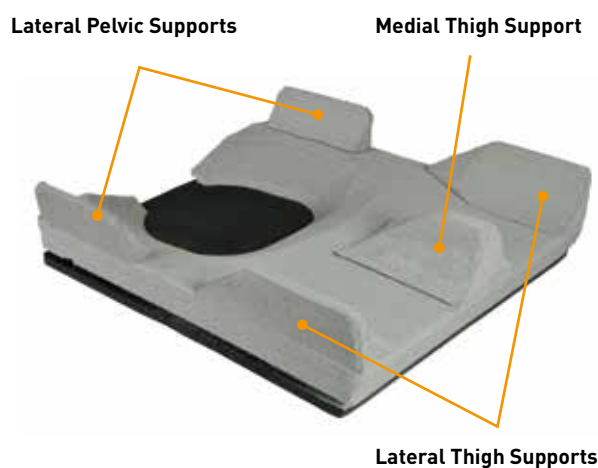
The following positioning accessories are available

- 25 and 50 mm lateral thigh supports
- 25 and 50 mm medial thigh supports
- 50 mm lateral pelvic supports
- Pelvic obliquity wedges
- Solid seat
- Adjustable drop seat



The JAY® J3 positioning capability is further enhanced by the ability to carve the base and also modify fluid levels. Base modifications can be done either at the factory or in the field. Cutting and/or carving the base will not damage the structural integrity of the closed cell foam base.

Note: a one-time, free replacement base will be supplied if a mistake is made during carving the base



### 2) Base Standard already included in the base

20° contracture cut



Seat rail notches



Multiple custom modifications are available for a personalized fit (see website).



## F) Evaluation Kit

To provide the opportunity to achieve optimal fit, immersion, stability and positioning the following evaluation kits are available:

### 1 PLA Evaluation Kit – available in standard and deep version

This Box contains a variety of FV Fluid and Air Inserts, all sizes of supplement pads and a PLA C --> B reducer ring

PLA Evaluation Kit



### 2 Positioning Evaluation Kit

This Box contains a variety of sizes of medial and lateral thigh supports, lateral pelvic supports, pelvic obliquity wedges and adhesive tape

## Science of Seating



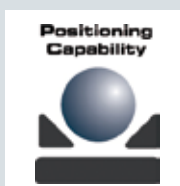
Equalizes loading forces to reduce peak pressures



Tension-reducing materials maintain superior pressure reduction



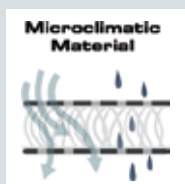
Provides pressure reduction, positioning and stability



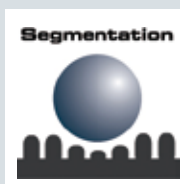
Provides proper positioning for postural needs



Provides stability for optimal function



Allows the passage of air, heat and water from the user



Helps localize change to minimize instability and the spread of tension

additional information under  
[www.scienceofseating.com](http://www.scienceofseating.com)

# www.jay3seating.eu

## Combine a J3 cushion with a J3 back for a complete positioning system

The benefits of the JAY® J3 cushion can only truly be maximized in conjunction with an appropriate back support to optimise alignment, stability, comfort and function.

With the ability to customize both the cushion and the backs, a wide variety of clinical needs can be met. Versatility, adjustability and modularity provide the complete seating system for the end user's needs today with tomorrow's needs in mind. Please ask for details on our extensive range of JAY® J3 backs.

## STEPS Clinical training

Sunrise Medical provides a variety of STEPs clinical training programmes open to clinical and commercial customers. The clinical courses are as follows:

- Seating and Positioning for Function and Mobility
- Power Wheelchair Mobility
- Manual Wheelchair Mobility
- Seating and Mobility for Paediatric Wheelchair Users
- Seating and Mobility for Adult Wheelchair Users
- Seating and Mobility for Elderly Wheelchair Users



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