

# medstrom solo<sup>®</sup> LUXE



Protecting Children &  
Adults with Atypical Anatomy

**medstrom<sup>+</sup>**  
Improved Patient Outcomes

# A clinical conundrum



## Meeting the demand

With an increasing demand on paediatric departments and an ever-growing complex cohort of patients, the need for a hospital bed that addresses the following has become critical:



Entrapment concerns



Mental health conditions



Suitability for all ages, including adults of atypical anatomy

# On High Alert

In August 2023, a National Patient Safety Alert was issued by the MHRA, in response to continued reports of serious injuries and death due to entrapment and falls.<sup>1</sup>

Whilst this alert sought to provide clarity, it also created confusion within the healthcare sector, with misleading claims or misinterpreted information surfacing around compliance and compatibility of existing hospital beds.



### DID YOU KNOW?

When the MHRA alert was issued, there were no acute low-height medical beds available in the UK which met both the children's and adult standards.

## What are the standards?

The MHRA alert referenced the two international standards for medical beds, namely:



**Adults:**  
IEC 60601-2-52:2009+A1:2015.



**Children:**  
BS EN 50637:2017. This standard also applies to adults with atypical anatomy (small stature).

The MHRA alert stated that healthcare providers must ensure that children and adults with atypical anatomy are given equipment (bed/cot/crib) which is compliant with BS EN 50637:2017.

# Reacting to your needs

As a UK manufacturer, Medstrom is in a unique position to react swiftly to clinical challenges in the healthcare arena. Listening carefully to key opinion leaders and clinicians, Medstrom is proud to introduce a hospital bed, designed to meet the needs of children, young adults and adults with atypical anatomy whilst also uniquely addressing mental health challenges.

## Compliance built in

The Solo Luxe meets the criteria for BS EN 50637:2017 (plus BS EN 60601-2-52), ensuring:



The handset is not available for patient use.



Ligature risks from wires are minimised.



Gaps between moving parts are less than 7mm or greater than 25mm to minimise the risk of finger trapping.



There are no sharp edges.



Enclosed gaps – such as those within head/foot boards and side rails are less than 60mm to reduce the risk of entrapment or strangulation.



Did you know, this is beneficial for busy ward environments where clinicians don't have time or available space to source different beds for different patients? It also enhances patient experience and dignity, ensuring adults are not placed on equipment designed solely for children.



## What do the standards entail?

### Watch our bitesize video to find out more.

To support training amongst clinicians, Medstrom put together this bitesize explainer video, highlighting the key differences in the standards and their implications on side rails in particular.

Scan the QR code to watch!

SCAN FOR FACTS



YOU CAN TRUST

One bed. Single solution.



 medstrom solo<sup>®</sup> LUXE

# Early and safer mobilisation



Ultimate safety to meet  
changing needs



Universal solution for many challenges



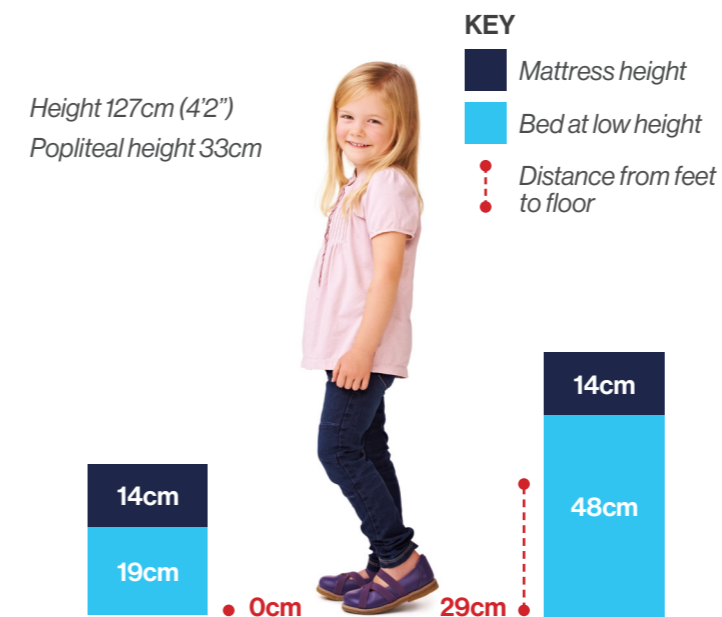
A clinically effective solution  
without compromise



The bed's low height reduces the risk of injury from falls.<sup>9</sup> It also allows almost all patients who are eligible to use it (> 125cm tall) to mobilise safely. The safest height from which to start mobilising is the popliteal height.<sup>10</sup> This is the distance from the floor to the underside of the knee, with feet flat on the floor, and heels, knees and thighs all at a 90° angle. Safe, early mobilisation for more patients helps to improve clinical outcomes and reduce complications of immobility.

## The low height difference

This to scale illustration shows the difference between the Medstrom Solo Luxe 19cm low height and a bed with a low height of 48cm.



## The side rail difference

The three segment side rails offer several unique benefits:



### Easier mobilisation:

Lowering the middle side rail allows the other two to become mobilisation aids, providing a dual-sided surface to grip and support.



### Patient safety:

Clicking and releasing the triggers on the outside of the side rail makes it a two-stage lowering process, preventing unintended lowering from inside the bed.



### Visibility:

The clear polycarbonate infills afford the patient greater awareness, whilst aiding easier patient monitoring, including when the bed is flat.

The Medstrom Solo® Luxe is a **UK manufactured bed** that offers a suite of **clinical benefits built-in.**



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**1 Cable-free, wireless handset:** Using a Bluetooth connection, caregivers can operate the Solo Luxe remotely as and when required, ensuring it is out of reach of children.

**2 Superior battery life:** Battery powered bed providing 4 times greater battery backup and means a powered cable is only needed when the bed needs charging, mitigating ligature risk. Only available on specific models.

**3 Concealed cables:** Concealed cables via robust trunking that prevents unintended access and anti-intrusion panels eliminating access underneath.

**4 Customisable sleep decks:** Available in removable or fixed sleep decks dependent on clinical preference.

**5 Polycarbonate, transparent, tamper-proof infills:** Designed to reduce gaps and available anchor points, providing ultimate safety and visibility for all.

**6 Superior patient positioning:** Via the wireless handset, the four sections of the bed can be articulated easily and smoothly, achieving a full cardiac chair position among its range of functions.

**7 Smooth, reinforced harm-free design:** The curved frame, head/footboards and side rails are all free from sharp edges.

**8 Feet on the floor, say no more :** With an ultra-low height of 19cm, the Solo Luxe achieves the appropriate popliteal height for all, including children. What's more, the custom height feature enables clinicians to programme the correct height to an individual patient, ensuring safe mobilisation at all times and reducing the risk of falls.

**9 Customisable decals :** Dependent on clinical use, the Solo Luxe is available with a range of customisable decals for you to choose from, including 'Iceberg Pine' or 'Subtle Stars'. Only available on specific models.

**10 Innovative side rails:** The unique configuration of 3-segment side rails provide protection when in the up position and facilitates easier mobilisation in the down position. Equipped with a patented AutoLock feature which automatically locks when the bed is put in the lowest position, the design enables smart safety for all.

Technical Specification			
<b>Minimum height:</b>	19cm	<b>Maximum height:</b>	81cm
<b>Safe working load:</b>	258kg (41st)	<b>Max patient weight:</b>	193kg (30st)
<b>Back rest angle:</b>	70°	<b>Knee angle:</b>	30°
<b>Calf angle:</b>	20°	<b>Trend/reverse Trend angle:</b>	+ 14° / - 14°
<b>Total length and width:</b>	227cm x 103cm	<b>Sleep deck dimensions:</b>	206cm x 91cm

## References:

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4. Monitoring the Mental Health Act in 2022/23 (2024). Care Quality Commission (CQC). Available at: Children and young people - Care Quality Commission (cqc.org.uk)
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10. Martindale D (2021). Calculating bed height for hospital patients using popliteal measurement. Nursing Times [online]; 117: 10

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