



HydroTilt

Our Dependable Comfort Chair

**Assessment &
Prescription Guide**

CareFlex



Standard Features At A Glance

Individuals and their support network can rely on the HydroTilt; it is an accommodating all-round chair for posture, pressure and comfort. With an adaptable fit and Tilt-in-Space functionality, the HydroTilt is an ideal choice when posture and pressure care are of equal priority. It is suitable for a wide range of seating needs in all domestic, health and care environments. It also provides high levels of comfort and robust construction making it suitable for long-term care.

The HydroTilt is offered in mini, small, medium and large sizes and is also modular in design ensuring that it can be easily tailored to the individual. With a range of accessories available it is a reliable chair that can be configured to different seating needs.

- A choice of back support, including flat, contoured and waterfall back rest cushions, and the option to add adjustable lateral support, ensures optimum trunk support for the user.
- Tilt-in-Space improves pelvic stability without affecting the user's hip and knee angles, promotes energy management and encourages pressure redistribution.
- Integral pressure management with WaterCell Technology and adjustable seat depth encourages maximum support and equal weight distribution with the aim of reducing the risk of pressure injury.
- A negative angle leg rest facilitates standing and offers a more comfortable seating position for users with tight hamstring muscles or knee contractures.
- The height and angle adjustable flip-up footplate can accommodate fixed angles of plantar flexion at the ankle, and provides a more restful ankle position whilst supporting the foot. The footplate can be adjusted and set to a choice of 5 positions; +90° (vertical), +15°, 0° (horizontal), -15° and -30°; this equates to a 120° range of adjustment. In all positions the footplate can be easily lifted up to vertical to move it out of the way for safe transfers.
- To help in hospital settings or multi-user environments where attention to infection control is critical we are able to offer infection control covers; we have replaced Velcro in all exposed areas with plastic profile fittings and zips and minimised exposed seams.

CLIENT GROUPS

- Semi-ambulant and non-ambulant
- Frail and elderly
- Neurological and neuromuscular conditions
- Cardiovascular conditions
- Orthopaedic conditions

ENVIRONMENTS

- Domestic and home care
- Nursing and residential homes
- Hospital wards
- Hospices and respite care
- Paediatric units and schools

FEATURES

- Tilt-in-Space
- WaterCell Technology for optimum pressure management in the seat and backrest
- Elevating and negative angle leg rest
- Angle adjustable flip-up footplate
- Two braked castors
- Removable covers for easy clean and replacement



Watercell Technology

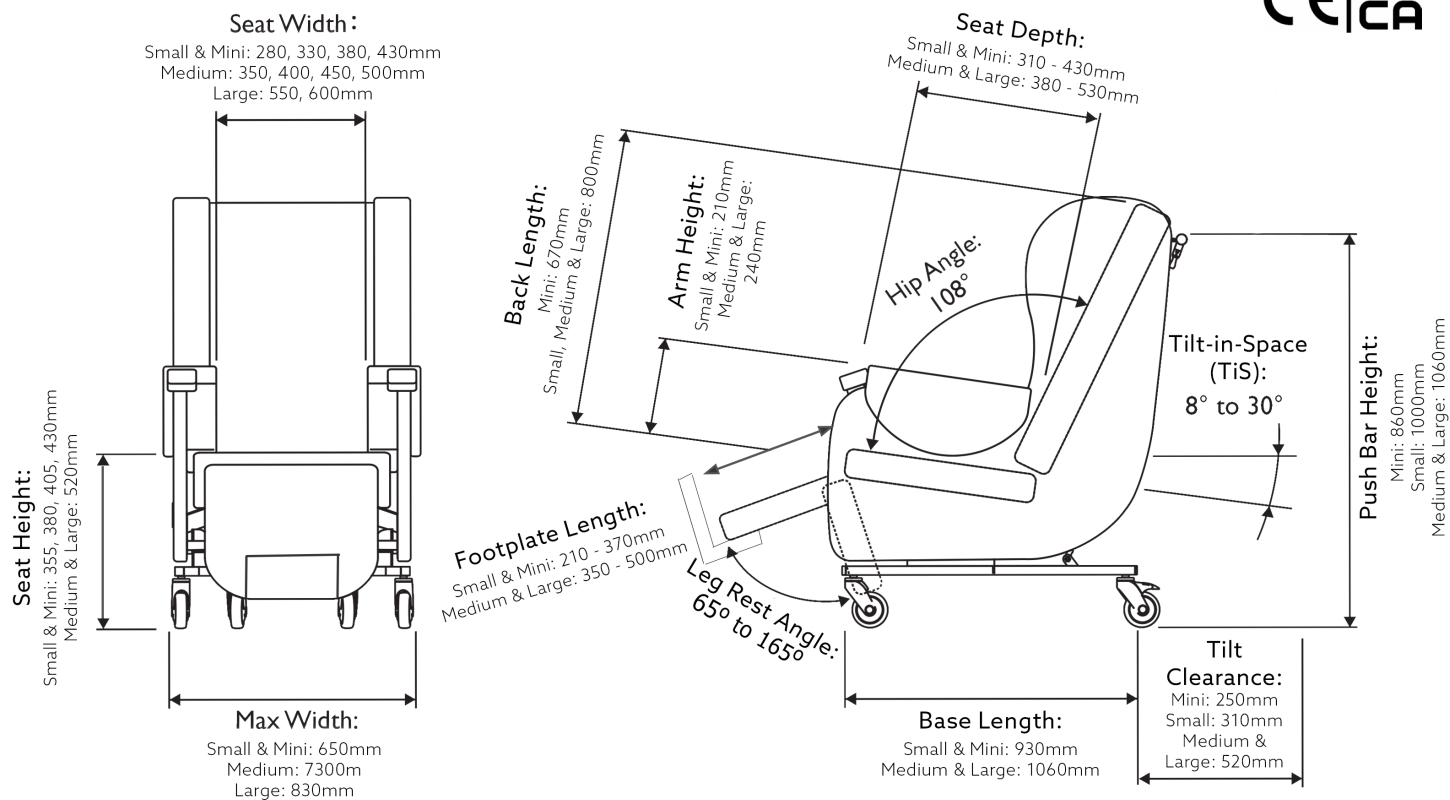


Tilt-in-Space



Flip-up and angle adjustable footplate

Technical Data



Key Measurements	
Mini/Small: Internal Seat Width	280/330/380/430mm
Medium: Internal Seat Width	350/400/450/500mm
Large: Internal Seat Width	550/600mm
Maximum User Weight	75kg (small/mini) 160kg (med/large)
Medium Chair Weight	59kg

(All measurements ±10mm / 5°)

Additional Extras

- Contoured or Waterfall Back
- Motorised Control Options
- Pommel
- Lateral Supports
- Choice of Headrests
- Choice of Positioning Aids
- Tray
- Footplate Pads and Pillows



Taking Measurements

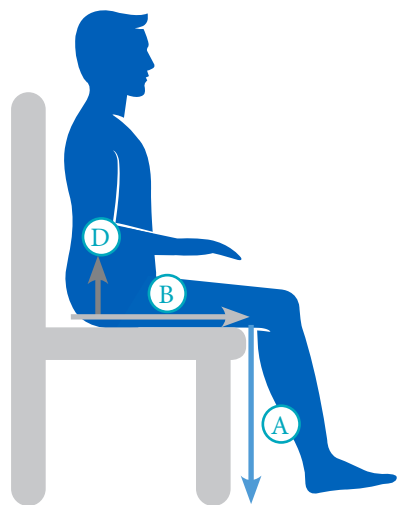
Every chair must be set up to fit its user, supporting posture appropriately and ensuring maximum contact with the support surface to distribute weight evenly whilst maintaining comfort and independence. Chair set-up influences positioning, which can consequently impact the risk of secondary complications, including postural deterioration, pressure injury and reduced quality of life.

Please refer to the Clinical Justification & Case Studies document for detailed information on assessment, prescription and clinical reasoning. It is critical that the seating prescription and subsequent set-up are based on the individual's body shape and size determined during the seating assessment; if it is not, then it can cause more harm than good.

Taking Measurements

Ensure optimum sitting position before measuring. These are guidelines only as they will be affected by the client's size and shape and the functions and accessories prescribed.

- A) **Seat height** - popliteal fossa to footrest/floor
- B) **Seat depth** - back of the pelvis to the back of the knee minus approx. one inch (both left and right measured)
- C) **Seat width** - hip width/two widest points plus up to 0.5 inch each side
- D) **Arm rest height** - seat base to elbow (both left and right measured)
- Back angle** - dependent on hip range of movement
- Leg rest angle** - dependent on knee range of movement



MEASUREMENT	ADJUSTMENT RANGE	MEASUREMENT TAKEN
Seat Depth	Mini/Small - 310mm - 430mm Medium/Large - 380mm - 530mm	
Seat Width	Mini/Small - 280/330/380/430mm Medium - 350/400/450/500mm Large - 550/600mm	
Seat to Footplate Height	Mini/Small - 210mm - 370mm Medium/Large - 350mm - 500mm	
Seat Height	Mini/Small - 355/380/405/430mm Medium/Large - 520mm	
Arm Rest Height	Mini/Small - 210mm Medium/Large/ - 240mm	

Pressure Care

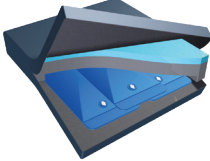
Posture and pressure are inextricably linked; body posture and positioning have a direct influence on the pressure going through specific body sites.¹ The body can only withstand high interface pressures for a short period of time, and when the loading of tissues is unequal and/or pressure isn't regularly redistributed; pressure ulcers can occur² There are also a number of contributing or confounding factors, including pressure, shear forces, friction and moisture, associated with pressure ulcers.

Everyone is potentially at risk of developing a pressure injury.³ The impact of a pressure injury is profound, with individuals being affected physically, psychologically, socially, emotionally, spiritually, and financially.⁴ Appropriate management or, better still, prevention can not only improve an individual's outcomes and quality of life, but it can also reduce the costs of health and social care services benefiting the wider community. A key intervention is pressure redistribution; regular repositioning is critical for those deemed at risk of developing a pressure injury as it is believed to be one of the most effective methods for preventing skin damage.¹

Specialist seating systems aim to reduce the risk of pressure injuries by distributing the user's body weight evenly throughout the chair over the maximum surface area with posture supported as aligned and symmetrical as possible. The opportunity to sit out can offer a much-needed change of position to encourage blood flow and redistribute pressure.

Professional guidance from a Tissue Viability Nurse or District Nurse may be indicated.

The HydroTilt features vapour permeable fabric as standard to all contact areas - seat, back, leg rest and arm rests. The Tilt-in-Space function can also be utilised to redistribute pressure by changing the tilt angle of the chair on a regular basis. It is important to ensure a thorough assessment of risks, including any swallowing difficulties, before prescribing this function as it may not be safe or appropriate for every user; the tolerated tilt angle will need to be clearly documented in the care plan.

CUSHION TYPE	DESCRIPTION	IMAGE
CareFlex Watercell Technology (Standard)	Our WaterCell Technology provides a reliable and dynamic pressure care solution for people at medium to high risk of pressure injury.	

- The HydroTilt offers WaterCell Technology as standard, which provides a reliable and dynamic pressure care solution for people at medium to high risk of pressure injury.
- WaterCell Technology enables the individual to achieve a stable and functional posture without compromising on pressure care and comfort.
- The water cells work by allowing the seat cushion to contour naturally and effectively around the user's body.
- The layer of Visco-Elastic Memory Foam moulds to the shape of the buttocks and thighs, distributing weight over a larger surface area and minimising pressure build-up under bony areas.
- Vapour permeable upholstery works synergistically with the WaterCell Technology to provide continuous pressure redistribution.

Postural Support

When an individual's ability to achieve good posture is affected, either through age, illness, injury, disease or disability, it can have a significant impact on their health and wellbeing. Specialist seating aims to allow individuals, who might otherwise have difficulty, to achieve their optimum sitting posture to sit out comfortably, interact with their environment, participate in activities of daily living and enhance physiological function.

Postural care is the use of any technique to minimise postural abnormality⁵. Lack of postural care and prolonged abnormal sitting postures can cause tension in the body and increase the risk of significant secondary complications, such as exacerbated pain and postural deterioration.⁶ Proper positioning can decrease fatigue whilst helping to alleviate chronic discomfort and maximise function.⁷ As the body structure is supported and the segments work together efficiently, the individual will experience improved comfort, stability, functional movement, and energy conservation.

The HydroTilt offers a range of functions and accessories to promote good postural support at all body segments, especially pelvic stability, trunk alignment and foot support.

Tilt-in-Space (TiS)

- Tilt-in-Space can promote pelvic stability and assist with positioning by encouraging the pelvis to remain at the back of the chair.
- Tilt-in-Space can be a key function in order to achieve energy conservation by allowing periods of rest, without affecting the critical angles for sitting.
- Tilt-in-Space can be used to reposition an individual against the forces of gravity in different degrees of tilt to redistribute pressure and ultimately reduce the risk of pressure injury.
- Upgrading to motorised AutoTilt will allow Tilt-in-Space to be adjusted automatically over a short or long cycle allowing for regular repositioning and pressure distribution whilst promoting independence within the user's residence.

TiS should be prescribed responsibly, ensuring it is safe and appropriate for the user following a comprehensive posture and risk assessment

Adjustable Laterals

- External and removable laterals with independent height and width adjustment may be indicated for individuals who require firmer trunk control to achieve an optimum upright midline position.

Negative Angle Leg Rest

- The negative angle at the leg rest can accommodate limited knee range of movement allowing a more comfortable seating position for those with contractures or tight hamstrings muscles.
- A negative angle leg rest can also facilitate safe standing by allowing optimum foot placement.

Angle Adjustable Footplate

- 19% of an average person's body weight is distributed through their feet when seated.⁸
- Insufficient foot support can negatively impact on postural stability and pressure risk; individuals naturally seek support through the feet to obtain the proprioceptive feedback required.
- The height and angle adjustable flip-up footplate is ideal for users with a longer lower leg length or for those who require their feet to be supported.
- The footplate accommodates fixed angles of plantar flexion at the ankle, and provides a more restful ankle position whilst supporting the foot.

Postural Support








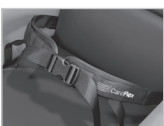




TYPE	ADJUSTMENT RANGE	MEASUREMENT TAKEN / SELECTION
Tilt-in-Space (TiS)	8° to 30° (22° Range) (Manual & Motorised)	
Leg Rest Angle	65° to 165° (100° Range) (Manual & Motorised)	
Footplate Angle	Four Positions – 75° / 90° / 105° / 120°	
Lateral Width (If Applicable)	150mm Adjustment Range	
Lateral Height (If Applicable)	140mm Adjustment Range	
Adjustment Control Option	Manual / Pro-Control (Leg Rest & TiS Only) / Fully Motorised	

Clinical Notes:

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Optional Extras

We have a range of accessories and options; see the price list for a full list of accessories available.

CUSHION TYPE	DESCRIPTION	IMAGE	SELECT
Waterfall Back	<ul style="list-style-type: none"> Consists of a lumbar and thoracic section Must be selected with a headrest Encourages trunk alignment while managing pressure and comfort 		<input type="checkbox"/>
Contoured Back	<ul style="list-style-type: none"> Provides gentle lateral feedback and support for the trunk Centralises the posture with contoured pads 		<input type="checkbox"/> <input type="checkbox"/> 450mm 500mm Width
Pommel	<ul style="list-style-type: none"> Encourages thigh alignment Assists with maintaining pelvic stability 		<input type="checkbox"/>
Lateral Supports	<ul style="list-style-type: none"> External and removable trunk control with independent height and width adjustment May be indicated for individuals who require firmer postural support to achieve an optimum midline position 		<input type="checkbox"/>
Soft Headrest	<ul style="list-style-type: none"> A comfortable rectangular pillow to support the head Available in shallow and deep 		<input type="checkbox"/> <input type="checkbox"/> Shallow Deep
Soft Profiled Headrest	<ul style="list-style-type: none"> A contoured pillow to support shoulders, neck and head Encourages head alignment for interaction and optimum physiological function Available in shallow and deep 		<input type="checkbox"/> <input type="checkbox"/> Shallow Deep
Padded Pelvic Belt*	<ul style="list-style-type: none"> Intervention for anterior pelvic stabilisation Safety belt when portering individuals 		<input type="checkbox"/>
4-Point Padded Pelvic Belt*	<ul style="list-style-type: none"> Centre pull adjustment and comfort pads to reduce pressure on the front of the pelvis Secondary straps that pull down over the thighs at right angles to the seat base to maximise pelvic stability 		<input type="checkbox"/>
Groin Harness*	<ul style="list-style-type: none"> Positioning aid that provides maximum pelvic control Prevents the user from sliding forward in the seat Help stabilise the position of the pelvis 		<input type="checkbox"/>
Dynamic Chest Harness*	<ul style="list-style-type: none"> Provides anterior support and comfort whilst not restricting active positioning and function Lower straps have multi-direction buckles that swivel to avoid twisting and provide comfort 		<input type="checkbox"/>
Tray	<ul style="list-style-type: none"> Assists upper limb support Offers platform for activities 		<input type="checkbox"/>
Detachable Footplate Pad	<ul style="list-style-type: none"> To provide greater comfort Attaches to the footplate Available in 25mm, 50mm, 75mm and 100mm 		<input type="checkbox"/> Size_____

*All belts and harnesses must be prescribed, implemented and monitored responsibly following a comprehensive assessment of posture and risk. Please see Device safety information alert for further information: www.gov.uk/drug-device-alerts/all-posture-or-safety-belts-fitted-to-supportive-seating-wheelchairs-hoists-and-bathroom-equipment-risk-of-serious-injury-or-death

References

1. Sprigle S, Sonenblum S (2011) Assessing evidence supporting redistribution of pressure for pressure ulcer prevention: A review *Journal of Rehabilitation Research and Development* **48**(3):203-214
2. Waterlow (2007) *Pressure Ulcers* Available from: <http://www.judy-waterlow.co.uk>
3. National Institute for Health and Care Excellence (NICE) (2014) [CG179] *Pressure ulcers: prevention and management* Available from: www.nice.org.uk/guidance/cg179
4. Langemo DK (2005) Quality of Life and Pressure Ulcers: What is the Impact? *Wounds* **17**(1)
5. Farley R, Clark J, Davidson C, Evans G, MacLennan K, Michael S, Morrow M, Thorpe S (2003) What is the evidence for the effectiveness of postural management? *International Journal of Therapy and Rehabilitation* **10**(10):449-455
6. Royal College of Physicians (2016) *National clinical guideline for stroke* Available from: <https://www.strokeaudit.org/Guideline/Full-Guideline.aspx>
7. Cook AM, Hussey SM (2002) *Assistive Technologies Principles and Practice* St Louis: Mosby
8. Collins F (2001) An adequate service? Specialist seating provision in the UK *Journal of Wound Care* **10**(8):333-337

This image shows a full page of blank handwriting practice paper. It features evenly spaced horizontal blue lines across its entire surface. There are no margins, text, or other markings present.

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