

Wheelchair Cushions



Ottobock Seating Philosophy

Since its founding in Berlin in 1919, Ottobock has pursued a vision: to improve the mobility of people with disabilities through innovative products. In doing so, the company equates quality with “Quality for life”: the quality of life enjoyed by the people who use Ottobock products every day. Individuality, functionality, quality and design drive our innovation process.

Every wheelchair user requires unique seating and positioning for optimal support. Use this guide to identify your patient’s specific needs and the appropriate wheelchair cushion.

Seating solutions should consider

- User comfort: static and dynamic seating tolerance
- Functional independence: postural influences on mobility, communication, field of vision, breathing and swallowing, etc.
- Purposeful movement: vital for independence, mobility, comfort and well-being
- Safety: risk management balanced against potential benefits
- Pelvic position: influence on spinal shape, neck and head position
- Foot position: impact on the pelvis position
- Postural alignment and stability: effect of static and dynamic situation on positioning (up / down slopes, traversing cambers or when the wheelchair is used as a seat in a vehicle)
- Flexible postural changes: need for corrective support
- Fixed postural changes: need to accommodate and support
- Muscle tone: positioning influences muscle tone and reflexes
- Tissue tolerance: vulnerability to pressure, shear and unfavorable microclimate conditions

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Ottobock Seating Molecule



Good wheelchair seating should consider each individual's unique combination of requirements in order to optimize comfort, health and functional independence. The clinical seating molecule is a visual representation of the most critical design features which should be identified and prioritized in order to select the optimal seating solution.

All wheelchair cushions should be selected based on a prioritized combination of individual requirements. The rankings provided by each molecule in this brochure are designed to support, rather than replace, clinical reasoning when selecting between different Ottobock wheelchair cushions.

Ottobock Seating Molecule Key



low



medium



high



Pressure Redistribution

is the ability of a support surface to immerse and envelop the user, thus reducing damaging peak pressures.



Shear Reduction

is the ability of a material to move with a user, thus reducing damaging parallel shear forces deep in the tissue.



Microclimate Control

refers to a material's ability to dissipate heat and moisture, thus reducing discomfort and the risk of tissue injury.



Postural Stability

is the ability of a seat to support a user with poor sitting balance, thus helping to maintain a symmetrical seated position over time.



Postural Management

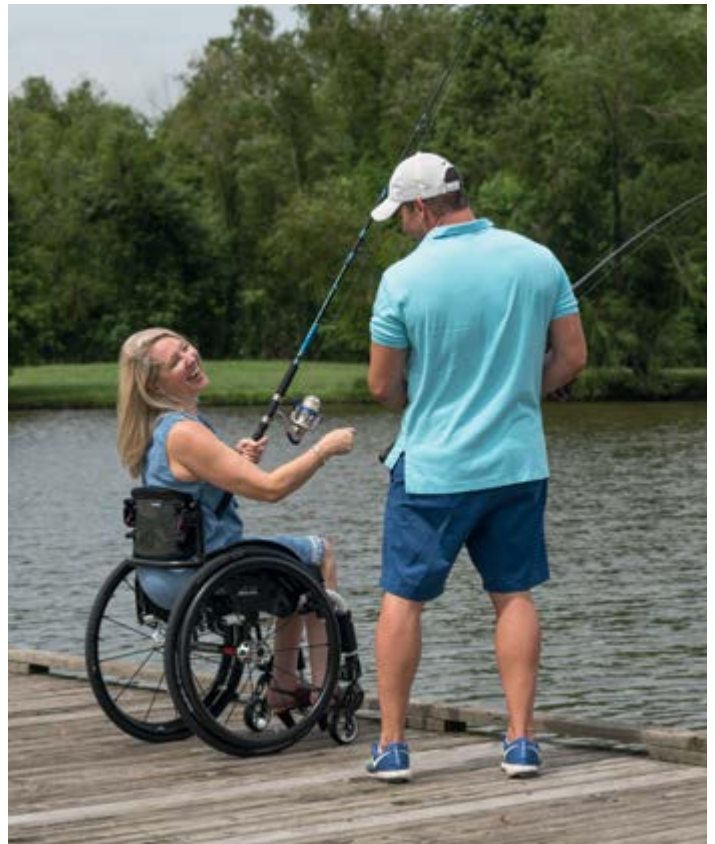
refers to seating systems that are anatomically shaped to promote good posture, or can be modified or adjusted to support or correct individual postures, e.g. pelvic obliquity.



Impact Damping

is the ability of a support surface to reduce shock and vibration, thus increasing user comfort and stability when in motion.





Terra



Cushioning and shear reduction for a smoother ride.

Application:

- Users at high risk of decubitus (elderly & neurological)
- Very bony prominence

Features

- Constructed of Ottobock Rest Suspension foam technology available only from Ottobock:
 - Elastically modified for excellent pressure redistribution
 - Improved impact damping compared to standard foams
- Anatomically molded profile:
 - Ischial loading area
- Water-resistant multi-stretch Dartex® outer cover
- 330 lb /150 kg user weight limit

Benefits

- Effective pressure redistribution for those at moderate risk of pressure ulcers
- Excellent ride comfort due to the impact damping properties of Rest Suspension foam
- High level of stability due to the properties of the Rest Suspension foam and anatomical form of the cushion
- Good postural support provided by the anatomical shape of the cushion



Terra Flair



The ultimate in air flotation, with the stability and security of foam.

Application:

- Users at high risk of decubitus (elderly & neurological)
- Very bony prominences

Features

- 2.75 in / 7 cm single valve, 5 x 5 cell, ROHO® adjustable air insert (12 x 9.5 in / 30 x 24 cm)
- Constructed of Ottobock Rest Suspension foam technology available only from Ottobock:
 - Elastically modified for excellent pressure redistribution
 - Improved impact damping compared to standard foams
 - More consistent performance over time
- Anatomically molded profile
- Water-resistant multi-stretch Dartex® outer cover
- 330 lb / 150 kg user weight limit

Benefits

- Optimal pressure redistribution for those at high risk of pressure ulcers
- Shear protection in the ischial area for additional skin protection
- Excellent ride comfort due to the impact damping properties of Rest Suspension foam
- High level of stability due to the properties of the Rest Suspension foam and anatomical form of the cushion
- Good postural support provided by the Rest Suspension trochanter support



Terra Aquos



Cushioning and shear reduction for a smoother ride.

Application:

- Users at risk of decubitus (active)
- Users sensitive to shock and vibration
- Foot propellers (with low seat high)

Features

- Four Liquicell inserts for micro-shear reduction during natural movements and transfers
- Constructed of Ottobock Rest Suspension foam technology available only from Ottobock:
 - Elastically modified for excellent pressure redistribution
 - Improved impact damping compared to standard foams
- Anatomically molded profile
- Water-resistant multi-stretch Dartex® outer cover
- 330 lb (150 kg) user weight limit

Benefits

- Effective pressure redistribution for those at moderate risk of pressure ulcers
- Shear protection for additional skin protection
- Excellent ride comfort due to the impact damping properties of Rest Suspension foam
- High level of stability due to the properties of the Rest Suspension foam and anatomical form of the cushion
- Good postural support provided by the anatomical shape of the cushion



Cloud Cushion



Adjustable postural management and pressure redistribution.

Application:

- Users at high risk of decubitus (elderly and neurological)
- Very bony prominences

Features

- Modular construction of up to 30 Floam cells, dependent on size
- A combination of Floam cells with low, medium and high fill enables individual configuration for individual postural needs
- Additional / replacement Floam cells available individually
- Available in sizes 12 x 12 in / 30 x 30 cm (9 Floam cells) to 23 x 15.75 in / 58 x 40 cm (30 Floam cells)
- Foam base with waterproof cover included for additional protection
- Water-resistant multi-stretch Dartex® outer cover
- 550 lb / 250 kg user weight limit

Benefits

- Excellent pressure redistribution over bony prominences, including trochanters for those at high risk of pressure ulcers
- Individual Floam cells ensure a high level of stability, e.g. for transfers
- Easy adjustment for postural deformity, e.g. pelvic obliquity



Floam is a fluid-like material that weighs approximately 30% less than typical fluid products. This light polymeric material offers pressure redistribution and reduces shear that is common to fluid-type cushions.

Advantage Cushion



Adjustable pressure redistribution with stability for easy transfers.

Application:

- Users at risk of decubitus (elderly & neurological)
- Users requiring shear protection
- Mild postural deformity

Features

- Modular construction of Floam cells in the ischial area of the cushion
- Additional / replacement Floam cells of different fill rates available individually
- Contoured front foam section with mild medial thigh support (abductor)
- Foam side supports
- Water-resistant multi-stretch Dartex outer cover
- 275 lb / 125 kg user weight limit

Benefits

- Excellent, adjustable pressure redistribution in the ischial area for those at moderate to high risk of pressure ulcers
- Floam provides excellent shear reduction for additional skin protection
- Foam front and side sections ensure a high level of stability for active users during transfers
- Lighter weight for easy handling, e.g. during car transfers
- Lower profile (3 in / 8 cm) making it suitable for both active users and the elderly



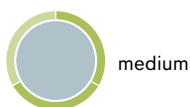
Comparison Chart



	Terra	Terra Flair
Dimension range (inches / cm)	14 x 14 in – 20 x 20 in (36 x 36 cm – 51 x 51 cm)	15 x 16 in – 20 x 20 in (38 x 41 cm – 51 x 51 cm)
Max user weight	330 lbs (150 kg)	330 lbs (150 kg)
Cushion weight	2.2 lbs (1 kg)	2.5 lbs (1.4 kg)
Cover material	Dartex	Dartex
Ischial area	2.75 in (7 cm)	2.75 in (7 cm)
Trochanter area	2.94 in (7.5 cm)	2.94 in (7.5 cm)
Thigh trough	2.38 in (6 cm)	2.38 in (6 cm)
Side wall	3.75 (9.5 cm)	3.75 (9.5 cm)
Pressure redistribution		
Shear reduction		
Microclimate control		
Postural stability		
Postural management		
Impact damping		



low



medium



high

Please contact your sales rep for information on special sizes.



Terra Aquos	Cloud	Advantage
14 x 14 in – 20 x 20 in (36 x 36 cm – 51 x 51 cm)	16 x 16 in – 24 x 20 in (41 x 41 cm – 61 x 51 cm)	13 x 14 in – 18 x 18.5 in (33 x 36 cm – 46 x 47 cm)
330 lbs (150 kg)	550 lbs (250 kg)	275 lbs (125 kg)
3 lbs (1.4 kg)	7 lbs (3.2 kg)	3 lbs (1.4 kg)
Dartex	Dartex	Dartex
2.75 in (7 cm)	Adjustable	Adjustable
2.94 in (7.5 cm)	Adjustable	3.13 in (8 cm)
2.38 in (6 cm)	Adjustable	3.13 in (8 cm)
3.75 (9.5 cm)	4.31 in (11 cm)	3.13 in (8 cm)



