



ACTIVE AIR® MATTRESSES



Pressure Injury prevention and management play a significant part in the overall care of residents and patients in aged and acute care settings. The Active Air range of alternating mattresses has been designed in accordance with the principles of international guidelines around pressure care. These guidelines clarify the key risk factors in Pressure Injury development. The Active Air range is a suitable solution for At-Risk to High-Risk users in all clinical environments.

5 Key Factors of Pressure Injury Prevention



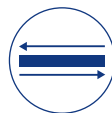
Pressure



Reperfusion
(Blood Flow)



Moisture /
Microclimate



Shear Forces

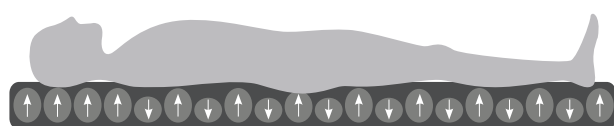
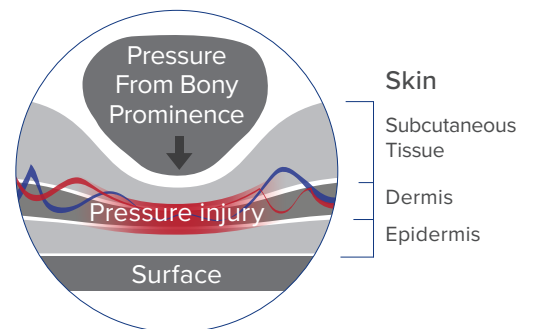


Nutrition

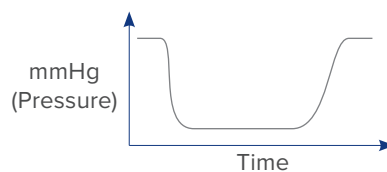
Pressure & Reperfusion

When a person has limited movement, pressure builds up at bony prominences and weight-bearing body parts. The pressure leads to the occlusion of small blood vessels, which restricts blood flow and oxygen delivery to the tissue. This causes cell and tissue death, which results in Pressure Injury.

Reperfusion is the flow of oxygenated blood following the relief of pressure. The Active Air range alternates in a 1-in-2 pattern so that 50% of body weight is relieved of pressure. This 'pressure on / pressure off' cycle encourages reperfusion and facilitates pressure reduction.



1:2 Cycle



Elasticised air cells 'rebound' quickly to maximise the pressure-off time.

Moisture / Microclimate

Microclimate refers to temperature and the interface between the skin and a support surface. Higher moisture levels lead to risk of pressure injury and poor skin integrity. Hotter skin requires more oxygen and nutrients. So the objective is to stay cool and dry.

The Active Air Bariatric system (PTM639510) has air cells which directly release air to promote a cool and dry microclimate.

Other Active Air mattresses encourage air flow through the alternating cycle by drawing and pushing air directly into the mattress as the cells inflate and deflate, helping to ventilate and reduce skin heat and moisture.

Multi-stretch vapour permeable covers assist in microclimate management. The high Moisture Vapour Transfer Rate (MVTR) promotes air flow and breathability for optimal skin conditions.



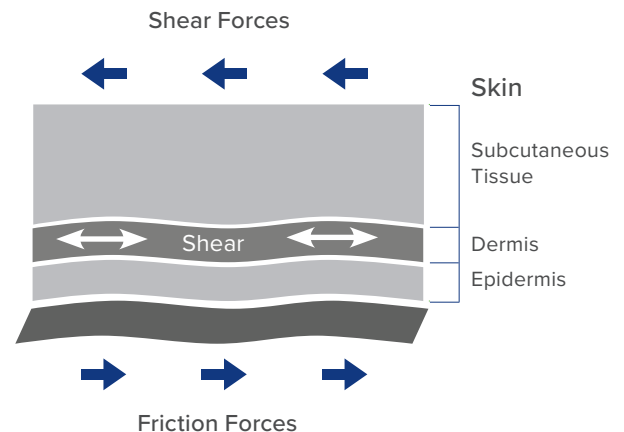
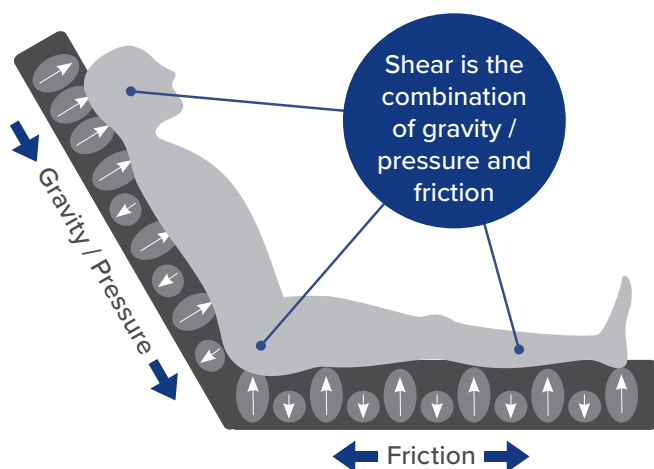
1. European Pressure Ulcer Advisory Panel, National Pressure Injury Advisory Panel and Pan Pacific Pressure Injury Alliance. Prevention and Treatment of Pressure Ulcers/Injuries: Clinical Practice Guideline. The International Guideline. Emily Haesler (Ed.). EPUAP/NPIAP/PPPIA; 2019.

Shear Forces

Shear is a significant cause of Pressure Injury development. Shear is the force created under the skin's surface when friction and pressure cause the top layer of skin to move with a support surface, while the underlying tissue remains stationary or moves in the opposite direction. When exposed to shear, the deeper layers of skin, along with blood vessels, become damaged. Shear forces can become more problematic when the head of the bed is raised.

Friction occurs when two surfaces slide against each other. In terms of pressure care, friction creates resistance between the skin and contact surface. It is a contributing factor to skin shear, which is a significant cause of Pressure Injury.

Multi-stretch covers move with the user, reducing friction and shear, whilst the vapour permeability promotes skin integrity and optimises skin microclimate.



Other Features:

Cell-In-Cell Technology

The alternating air cells contain an internal 'safety cell', which remains fully inflated to protect against 'bottoming out', increasing patient safety and greater surface stability.

AutoStay Band

Active Air overlays and mattresses feature the AutoStay retention band, which holds cells in place for maximum therapeutic effect.

Rapid Deflation CPR Valve

Optional Active Air Rapid Inflation Turbo Pump



aspire™ Mattresses & Overlays

Aspire Active Air® 4 & 5 Mattress Overlays

- Auto Detect: Pump adjusts its output based on the detected weight
- Intelligent Static Mode: Reverts to alternating cycle if static mode left on
- Variable cycle times: 10, 15, or 20 mins
- Optional: Rapid Inflation Turbo Pump



Code	Description	Length	Width	Height	Cells	Static Head Cells	Cell Cycle	Cycle Time
PTM639100	Active Air 4 Single	2000	850	100	19	3	1 in 2	10 / 15 / 20 mins
PTM639200	Active Air 5 Single	2000	850	130	16	3	1 in 2	10 / 15 / 20 mins
PTM639210	Active Air 5 King Single	2000	1050	130	16	3	1 in 2	10 / 15 / 20 mins
PTM639000*	Rapid Inflation Turbo Pump							

DVA AB14 *AB19 NDIS 05_043306004_0103_1_2 † Active Air 4 ‡ Active Air 5

All measurements are in mm unless otherwise specified.

Aspire Ultimate 8 Mattress Replacement

- Rapid release CPR for quick deflation in emergencies
- Whisper-quiet sleep environment with reduced noise and vibration, uses room-temperature air to regulate body temperature
- Easy to clean with welded seams, zip protection, and multi-stretch cover



Code	Description	Length	Width	Height	Cells	Static Head Cells	Cell Cycle	Cycle Time
PTM639320	Single	2000	900	200	20	3	1 in 2	11
PTM639330	King Single	2000	1050	200	20	3	1 in 2	11

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All measurements are in mm unless otherwise specified.

Aspire Active Air® 8 Mattress Replacement

- Auto Detect: Pump adjusts its output based on the detected weight
- AutoProtect: Air pressure increases when bed head raised to 45°+
- Continuous Low Pressure (CLP): Increases immersion and envelopment
- Optional: Rapid Inflation Turbo Pump



Code	Description	Length	Width	Height	Cells	Static Head Cells	Cell Cycle	Cycle Time
PTM639300	Single	2000	900	200	20	3	1 in 2	10/15/20/25/30 mins
PTM639310	King Single	2000	1050	200	20	3	1 in 2	10/15/20/25/30 mins
PTM639000*	Rapid Inflation Turbo Pump							

DVA AB14 *AB19 NDIS 05_043306211_0103_1_2

All measurements are in mm unless otherwise specified.

Aspire Active Air® 8 Acute Mattress Replacement

- TurnAssist: Tilts mattress surface up to 30° to aid bed washing, changing linen and clothing, manual handling, and relief of pressure
- Auto Detect: Pump adjusts its output based on the detected weight
- Optional: Rapid Inflation Turbo Pump



Code	Description	Length	Width	Height	Cells	Static Head Cells	Cell Cycle	Cycle Time
PTM639400T	Single	2000	900	200	24	3	1 in 3	10/15/20/25/30 mins
PTM639410T	King Single	2000	1050	200	24	3	1 in 3	10/15/20/25/30 mins
PTM639000*	Rapid Inflation Turbo Pump							

*DVA AB19 NDIS 05_043306211_0103_1_2

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Aspire Mattresses & Pressure Spectrum

The support system you choose should match the individual's needs. This guide was developed, based on best available evidence, to guide you in choosing the most appropriate Active Air System.

TREATMENT	PREVENTATIVE		THERAPEUTIC	
WATERLOW SCORE	<10	10+	15+	20+
BRADEN SCORE	18-15	14-13	12-10	<9
USER RISK PROFILE	(L) LOW	(M) MEDIUM	(H) HIGH	(V) VERY HIGH

Lifecomfort Foam & Hybrid Mattresses

Standard	(L)
Deluxe	(M)
Pressure Reducing	(M)
Premier Care	(M)
Acute Care	(H)
Premier Acute Care	(H)
MAXI Lifestyle	(H)
Bariatric	(H)
HYBRID	(H)
Mattress with ROHO Cutout	(H)

Mattress Overlays

Active Air® 4	(H)
Active Air® 5	(H)

Mattress Replacements

Ultimate 8	(V)
Active Air® 8	(V)
Active Air® 8 Acute	(V)
Active Air® Bari 10	(V)

IMPORTANT CONSIDERATIONS:

It is important to remember that this is a guide and that good clinical judgement is required when determining a person's Pressure Injury risk. Always consider recent changes in patient condition or physiology eg: illness leading to weight loss; reduced mobility due to injury; preparation for surgery and post-surgery outcomes. Assessment of Pressure Injury risk should be ongoing.

For full details on our Aspire Mattress range, please refer to our website or product catalogue.