SKIN PROTECTION AND POSITIONING
UNDERSTANDING MATRX® LIBRA

Skin breakdown is a result of external forces and internal factors. Matrx Libra has been designed to minimise the negative effects of external forces, optimise positioning to promote physiological functions, and ensure oxygen delivery to the tissues.

EXTERNAL FORCES

Pressure
A vertical force that occurs at a 90° angle.

Shear
Parallel forces, sometimes described as stretching forces occurring within the tissues near bony prominences.

Compression
Postural collapse that can impede the function of the internal organs.

Friction
The resistance that arises when one surface rubs against another.

Temperature/Moisture
Raised body temperature and higher humidity that can contribute to tissue damage.

MATRX - UNIQUE DESIGN

Immersion
Maximises surface contact area in order to reduce peak pressures. Pressure = Force/Area.

Off-Loading
Transfers forces away from the ischial tuberosities with greater weight bearing on the trochanters, hips and thighs.

Envelopment
Fluid sac completely surrounds the bony prominences, even during position changes. Supplement fluid sacs available for further enhancement.

Shear Management
Static: Support surface contour that prevents sliding and downward migration of the pelvis. Dynamic: Flow of materials reduces tension between bony prominences and tissues during functional activities, wheelchair propulsion, accommodates movement within a specific range. Optimal shear reduction addresses both static and dynamic shear without compromising posture.

Pelvic Stability
Contouring of the pelvic well provides lateral trochanteric support and anterior/posterior pelvic stability, promoting spinal extension for improved upper extremity function, head control and physiological function.

Adjustability
Ability to modify the Matrx cushions to accommodate or correct postural issues or changes over time.

OTHER FACTORS TO CONSIDER AND INCLUDE DURING ASSESSMENT

- Many internal factors impact skin integrity including general health and the body’s ability to deliver oxygen to the tissues e.g. cardiac, respiratory, digestive etc. The individual’s health is also affected by lifestyle factors such as smoking, nutrition, exercise, etc.
- Weight shifts and/or position changes should be addressed as an important part of a pressure sore prevention program.
- Unlike some other cushions, Matrx Libra performs consistently in various environmental conditions such as altitude, heat, cold etc.
- To maximise skin integrity, the ultimate postural set up should be addressed considering the relationship between the cushion and backrest. See Invacare’s clinical seating and positioning poster for further details.