

CuroCell® AREA

The CuroCell® AREA is a replacement mattress used in all types of health care environments. It is used preventatively and as an aid in treatment of pressure ulcers up to and including category 3⁽¹⁾. Because of its unique construction combining foam and air, this mattress provides high user comfort, as well as a solution for pressure care without the need for external pump or electricity.

CuroCell® AREA is delivered with a durable hygiene cover, which is easy to clean and has a very well documented hygienic standard⁽²⁾ and is manufactured with welded seams. The soft and elastic cover is vapour permeable⁽³⁾.

(1) European Pressure Ulcer Advisory Panel, Quick reference guide 2009.

(2) ISO 16603 "resistance of penetration by blood and body fluids", ISO 16604 "resistance of penetration by blood-borne pathogens", EN 14126, SS 876 00 19 "Health care textiles – Bacteria penetration – Wet".

(3) SS-EN ISO 15496:2004, DIN 53.122.

Examination of the pressure relief capability and the shear force

(Berlin Cert, 02/09/09)



CuroCell® AREA gets highest rate, "High Pressure Relief", and is 33 % better compared to the reference mattress (patient weight of 80 kg). Even at maximum load (230 kg) the average contact pressure is below 30 mmHg.

1. Pressure Area Index (PAI)	Patient weight of 80 kg	Patient weight of 230 kg
Below 30 mmHg	100 %	52 %
Below 20 mmHg	97 %	27 %
Below 10 mmHg	52 %	16 %

2. Examination of the shear forces

Maximum pulling force (Fmax)	187 N
Mean pulling force during slip-phase (Fquer)	183 N
Coefficient of sliding friction (µG)	0,75 ± 0,02
Horizontal stiffness (ΦH)	8,06 ± 0,36 N/mm

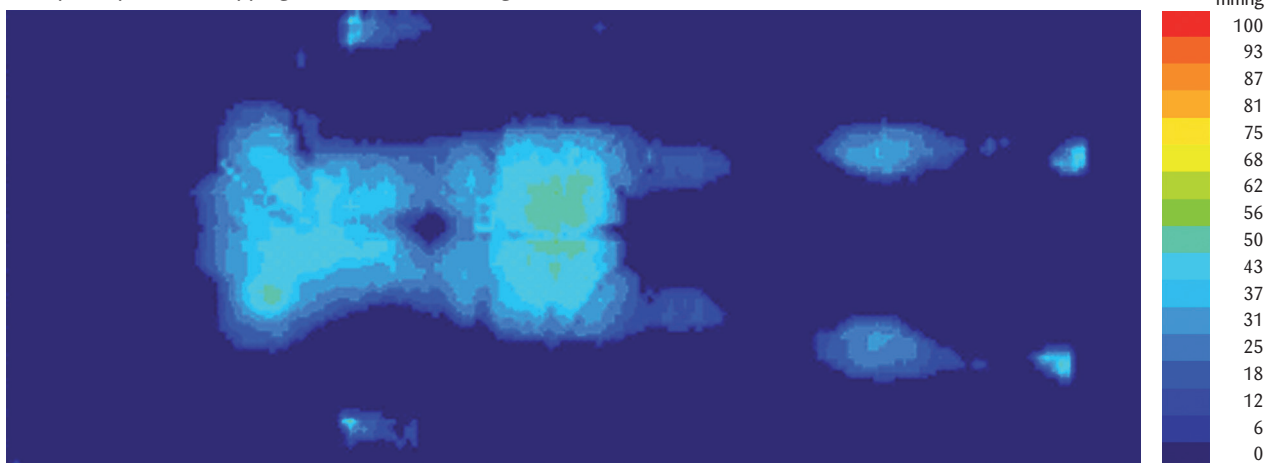
Comparative evaluation

(Care of Sweden, 30/04/09)

A check of the pressure relief capability, in comparison with products in the same area of use and from other leading manufacturers, CuroCell® AREA receives significantly better results⁽¹⁾. With a load of 80 kg CuroCell® AREA receives 7-30 % better RPI. At maximum load, the result is even more significant. CuroCell® AREA shows 22-35 % better RPI (RPI = Relative Pressure Relief).

(1) The data is collected from a public database (MDS Hilfsmittel Informations System 30/09/08). Compared products are AtmosAir 4000, AtmosAir 9000 and Vicair Academy Mattress ARM415.

Example of pressure mapping (Xsensor). Male, 88 kg, 182 cm.



Describes the characteristics of the device, it cannot directly predict clinical outcome.