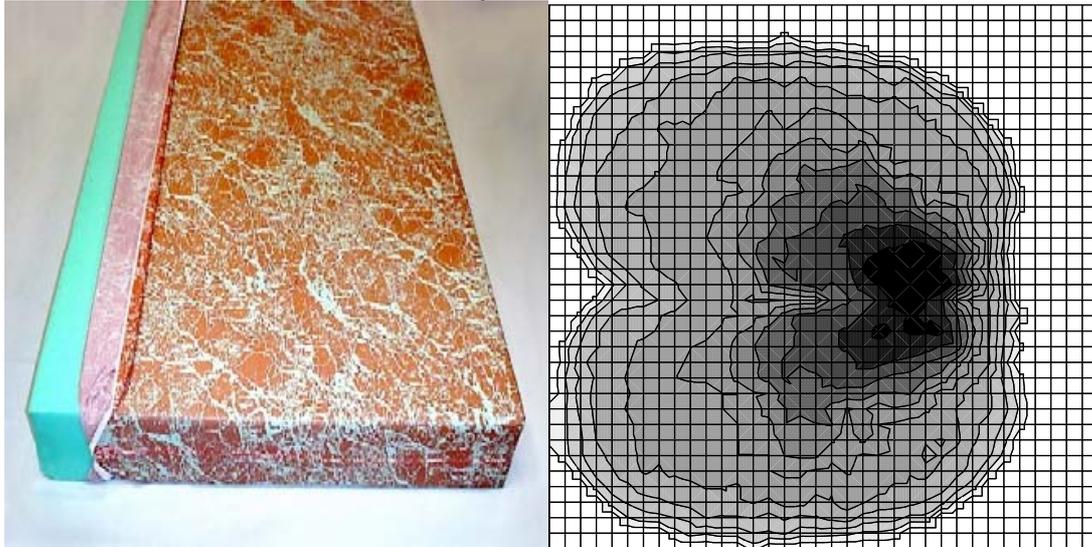


EVALUATION

MHRA 04101

Pressure reducing overlays

NHS ECONOMY (NO OVERLAY)**Pressure Map (10mmHg Isobars)**

This mattress is used as the standard base for all the evaluations in this report. It is manufactured under tender according to NHS specifications. The construction comprises a single piece of high resilience combustion modified foam, covered by a non-stretch waterproof fabric. Cover access is via a zip on one side only, with no protective flap to prevent ingress. No labelling or instructions of any kind are provided.

Peak Interface Pressure (pelvis)	124 +/-5 mmHg
Peak Interface pressure (heels)	136 +/-23 mmHg
Heat transfer rate	18.1 +/-0.2 Wm ⁻²
Vapour transfer rate	413 +/- 7 gm ² day ⁻¹
Longevity (% reduction Quince after 10 ⁵ cycles)	5 %
Fire retardancy	BS 6807:1996 Source 0, 1 and 5
Turning	Rotate and flip

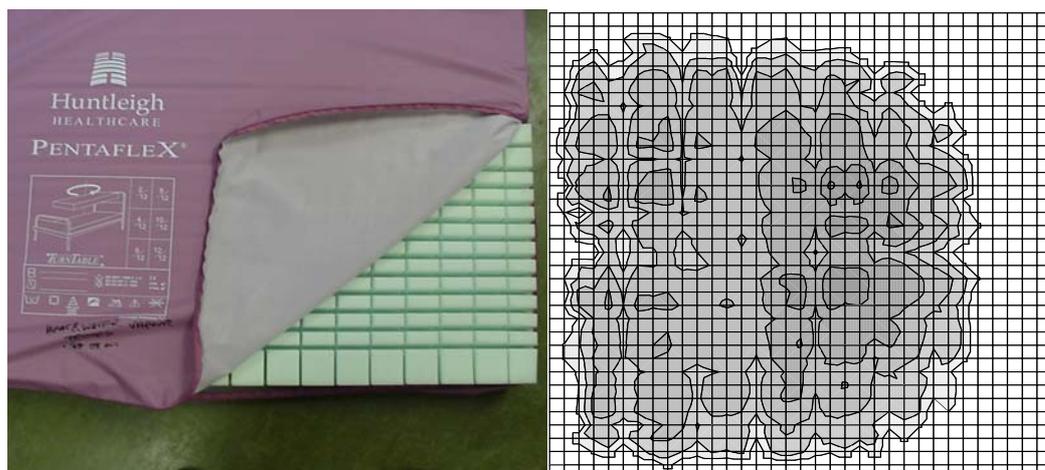
Evaluation

This is part of a series of reports relating to pressure reducing overlays, which are defined for these purposes as: supplementary mattresses designed for use on top of a standard mattress. with no actively powered parts. The first issue, MHRA 04101 - 0, constitutes a description and rationale for the criteria and test methods used to evaluate these products. In every case, the overlay is used in this report on top of a standard NHS Economy mattress.

Enquiries

For information on the SM series, please contact MHRA, Hannibal House, Elephant & Castle London SE1 6TQ. Tel: 020 7972 8181 E-mail: des@mhra.gsi.gov.uk

+ PENTAFLEX OVERLAY



Pressure Map (10mmHg Isobars)

The Pentaflex overlay comprises a single block of high resilience combustion modified foam, with profiled squares in the surface that compress individually. Square size varies over the surface to reflect body regions with different levels of loading. Rotation is recommended to improve longevity, and a schedule for this is printed on the cover. Cover access is via a zip on 2 sides, with no protective flap to prevent ingress. Cleaning instructions are printed on the cover. Straps are provided for attachment to mattress.

Peak Interface Pressure (pelvis)	63 +/-7 mmHg
Peak Interface pressure (heels)	91 +/-14 mmHg
Heat transfer rate	23.2 +/-0.3 Wm ⁻²
Vapour transfer rate	622 +/-5 gm ⁻² day ⁻¹
Longevity (% reduction Quince after 10 ⁵ cycles)	5 %
Fire retardancy*	BS 6807:1996 Source 0, 1 and 5
Turning*	Rotate
Supplier:	
Huntleigh Healthcare Ltd	
310 - 312 Dallow Road, Luton, Bedfordshire	
United Kingdom, LU1 1TD	
*Information provided by manufacturer	

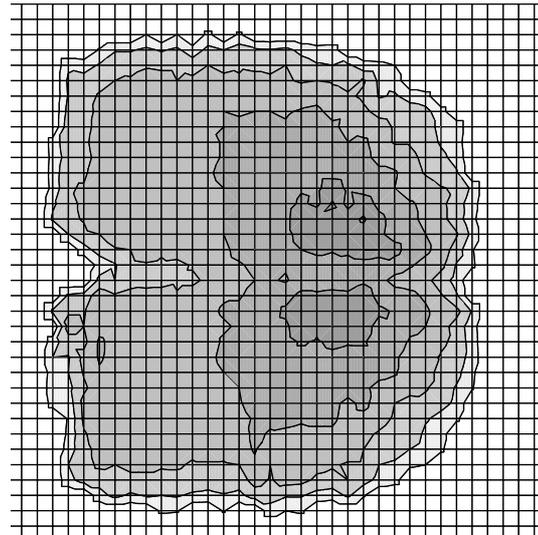
Evaluation

This is part of a series of reports relating to pressure reducing overlays, which are defined for these purposes as: supplementary mattresses designed for use on top of a standard mattress. with no actively powered parts. The first issue, MHRA 04101 - 0, constitutes a description and rationale for the criteria and test methods used to evaluate these products. In every case, the overlay is used in this report on top of a standard NHS Economy mattress.

Enquiries

For information on the SM series, please contact MHRA, Hannibal House, Elephant & Castle London SE1 6TQ. Tel: 020 7972 8181 E-mail: des@mhra.gsi.gov.uk

+ KAYMED OVERLAY



Pressure Map (10mmHg Isobars)

The Kaymed overlay comprises a solid block of temperature-sensitive viscoelastic foam.. Rotation only is required, and the top and bottom surfaces are clearly marked. Cover access is via a zip on two sides, with a protective flap to prevent ingress. Cleaning instructions are printed on the cover. Seams are stitched and welded to prevent ingress.

Peak Interface Pressure (pelvis)	61 +/-4 mmHg
Peak Interface pressure (heels)	63 +/-10 mmHg
Heat transfer rate	24.5 +/-0.1 Wm ⁻²
Vapour transfer rate	538 +/-4 gm ⁻² day ⁻¹
Longevity (% reduction Quince after 10 ⁵ cycles)	6 %
Fire retardancy*	BS 6807:1996 Source 0, 1and 5
Turning*	Rotate only
Supplier:	
Kaymed	
Bluebell Industrial Estate, Naas Road	
Dublin 12, Ireland	
* Information provided by manufacturer	

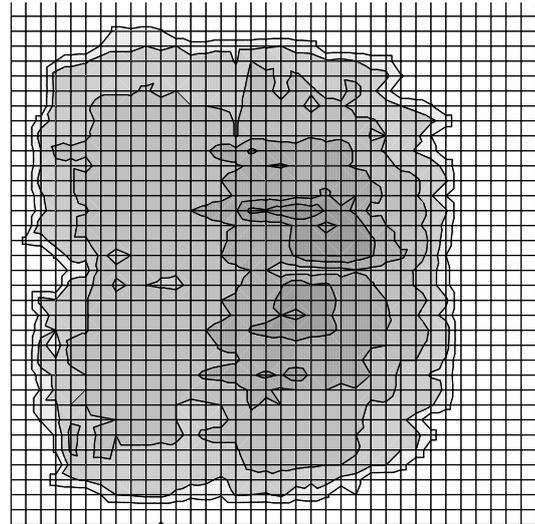
Evaluation

This is part of a series of reports relating to pressure reducing overlays, which are defined for these purposes as: supplementary mattresses designed for use on top of a standard mattress. with no actively powered parts. The first issue, MHRA 04101 - 0, constitutes a description and rationale for the criteria and test methods used to evaluate these products. In every case, the overlay is used in this report on top of a standard NHS Economy mattress.

Enquiries

For information on the SM series, please contact MHRA, Hannibal House, Elephant & Castle London SE1 6TQ. Tel: 020 7972 8181 E-mail: des@mhra.gsi.gov.uk

+ REPOSE



Pressure Map (10mmHg Isobars)

The Repose is a clear urethane inflatable device, which packs into a small space, with the potential for issue to an individual user, who may take the device home on discharge. Inflation is achieved by means of a pump that also serves as the packaging.

Peak Interface Pressure (pelvis)	77 +/-4 mmHg
Peak Interface pressure (heels)	98 +/-18 mmHg
Heat transfer rate	31.8 +/-0.2 Wm ⁻²
Vapour transfer rate	485 +/- 8 gm ² day ⁻¹
Longevity (% reduction Quince after 10 ⁵ cycles)	1 %
Fire retardancy*	BS 7177 : 1996 medium hazard
Turning*	None
Supplier:	
Frontie Therapeutics	
Newbridge Road Industrial	
Estate, Blackwood,	
South Wales NP12 2YN	
*Information provided by manufacturer	

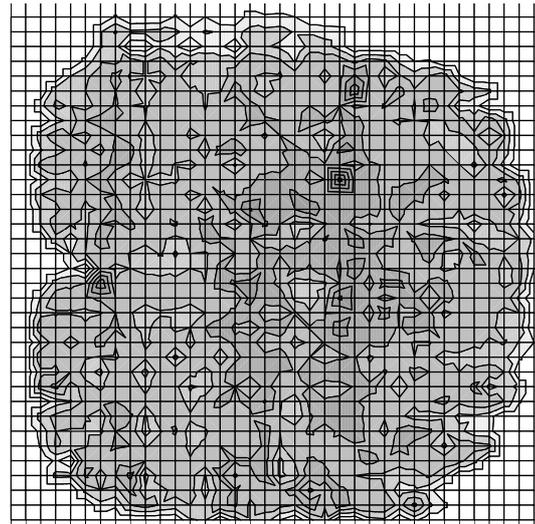
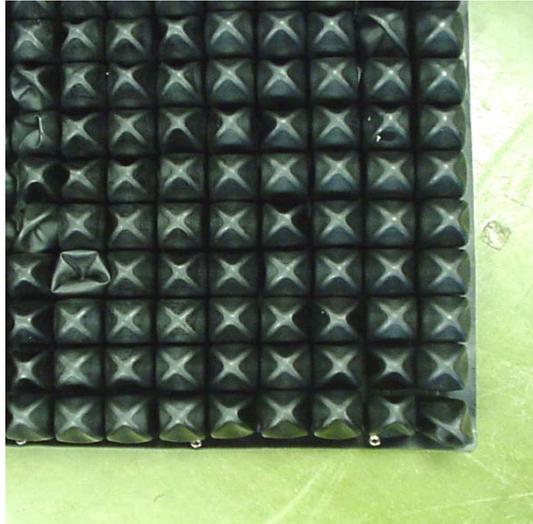
Evaluation

This is part of a series of reports relating to pressure reducing overlays, which are defined for these purposes as: supplementary mattresses designed for use on top of a standard mattress. with no actively powered parts. The first issue, MHRA 04101 - 0, constitutes a description and rationale for the criteria and test methods used to evaluate these products. In every case, the overlay is used in this report on top of a standard NHS Economy mattress.

Enquiries

For information on the SM series, please contact MHRA, Hannibal House, Elephant & Castle London SE1 6TQ. Tel: 020 7972 8181 E-mail: des@mhra.gsi.gov.uk

+ROHO MATTRESS OVERLAY



Pressure Map (10mmHg Isobars)

The Roho overlay consists of 3 inflatable sections which are assembled to form a complete mattress surface. Each section comprises a 2-dimensional array of interconnected air-filled protrusions. Pressure is shared between these protrusions via the air. Air is released from the system during set-up to allow conformation of the surface to the body.

Peak Interface Pressure (pelvis)	81 +/-9 mmHg
Peak Interface pressure (heels)	66 +/-12 mmHg
Heat transfer rate	28.3 +/-0.1 Wm ⁻²
Vapour transfer rate	379 +/-4 gm ² day ⁻¹
Longevity (% reduction Quince after 10 ⁵ cycles)	1 %
Fire retardancy*	BS 6807:1996 Source 0, 1and 5
Turning*	None
Supplier:	
Sumed International (UK) Ltd	
Unit 1, Wildmere Rd Industrial Est	
Banbury	
OxfordshireOX16 7TL	
* Information provided by manufacturer	

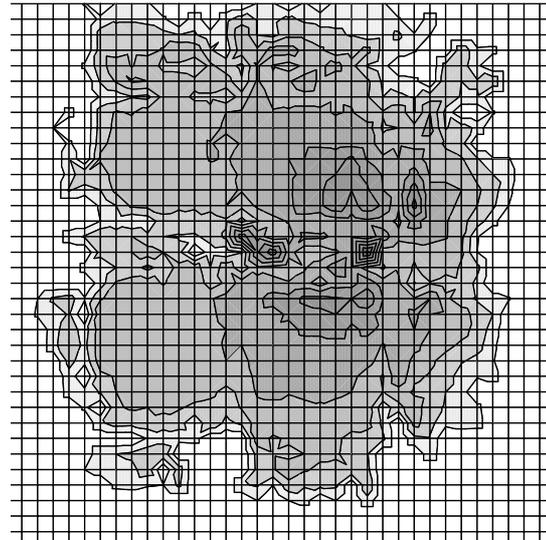
Evaluation

This is part of a series of reports relating to pressure reducing overlays, which are defined for these purposes as: supplementary mattresses designed for use on top of a standard mattress. with no actively powered parts. The first issue, MHRA 04101 - 0, constitutes a description and rationale for the criteria and test methods used to evaluate these products. In every case, the overlay is used in this report on top of a standard NHS Economy mattress.

Enquiries

For information please contact MHRA, Hannibal House, Elephant & Castle London SE1 6TQ. Tel: 020 7972 8181 E-mail: des@mhra.gsi.gov.uk

+ EHOB WAFFLE



Pressure Map (10mmHg Isobars)

The Pressurease Combi comprises a U-channel of high resilience combustion modified foam, with an inlaid profiled section comprising profiled squares which compress individually. Beneath the profiled squared section is a layer of visco-elastic foam. Cover access is via a zip on one end only, with a protective flap to prevent ingress.

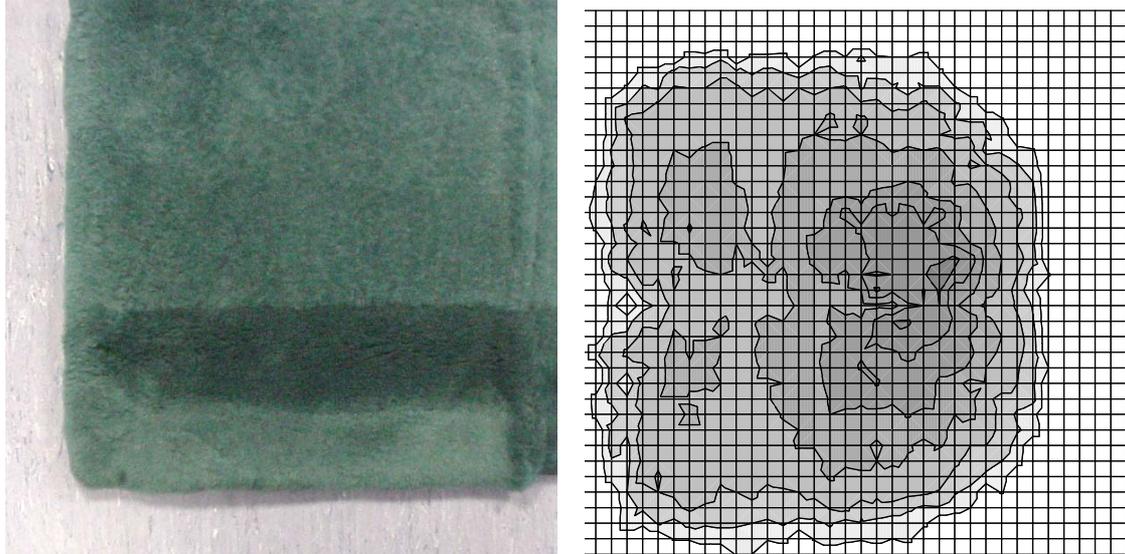
Peak Interface Pressure (pelvis)	115 +/-4 mmHg
Peak Interface pressure (heels)	98 +/-17 mmHg
Heat transfer rate	17.4 +/-0.1 Wm ⁻²
Vapour transfer rate	254 +/- 6 gm ² day ⁻¹
Longevity (% reduction Quince after 10 ⁵ cycles)	1 %
Fire retardancy*	BS 6807:1996 Source 0, 1, 5
Turning*	Rotate only
Supplier:	
Airtec Seating Ltd.	
Unit 39f, Vale Business Park	
Cowbridge,	
Vale of Glamorgan	
CF61 7PF	
*Information provided by manufacturer	

Evaluation

This is part of a series of reports relating to pressure reducing overlays, which are defined for these purposes as: supplementary mattresses designed for use on top of a standard mattress. with no actively powered parts. The first issue, MHRA 04101 - 0, constitutes a description and rationale for the criteria and test methods used to evaluate these products. In every case, the overlay is used in this report on top of a standard NHS Economy mattress.

Enquiries

For information on the SM series, please contact MHRA, Hannibal House, Elephant & Castle London SE1 6TQ. Tel: 020 7972 8181 E-mail: des@mhra.gsi.gov.uk

+ SHEAR COMFORT SUPERIOR OVERLAY**Pressure Map (10mmHg Isobars)**

The Shear Comfort Superior Overlay consists of sections of sheepskin sewn together to form a complete overlay. The sheepskin material has been treated to withstand washing at 80°C, and tumble drying at 60°C.

Peak Interface Pressure (pelvis)	72 +/-5 mmHg
Peak Interface pressure (heels)	62 +/-9 mmHg
Heat transfer rate	32.1 +/-0.1 Wm ⁻²
Vapour transfer rate	986 +/- 5 gm ² day ⁻¹
Longevity (% reduction Quince after 10 ⁵ cycles)	12 % (without re-laundering)
Fire retardancy*	BS 6807:1996 Source 0, 1and 5
Turning*	Rotate only

Supplier:
BES Rehab Ltd
9 Cow Lane,
Fulbourn,
Cambridge,
CB1 5HB

*Information provided by manufacturer

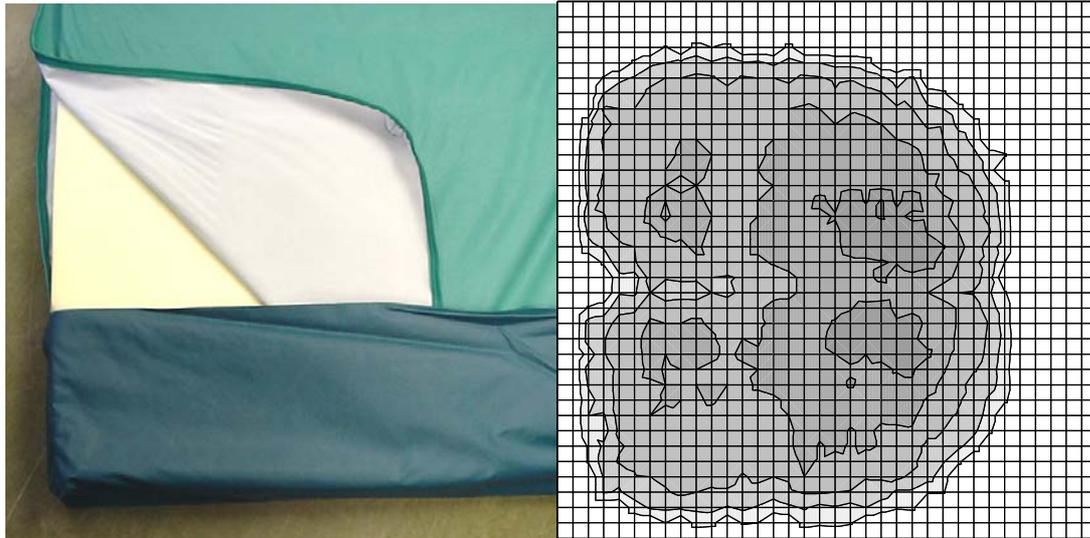
Evaluation

This is part of a series of reports relating to pressure reducing overlays, which are defined for these purposes as: supplementary mattresses designed for use on top of a standard mattress. with no actively powered parts. The first issue, MHRA 04101 - 0, constitutes a description and rationale for the criteria and test methods used to evaluate these products. In every case, the overlay is used in this report on top of a standard NHS Economy mattress

Enquiries

For information on the SM series, please contact MHRA, Hannibal House, Elephant & Castle London SE1 6TQ. Tel: 020 7972 8181 E-mail: des@mhra.gsi.gov.uk

+ TRANSVISCO OVERLAY



Pressure Map (10mmHg Isobars)

The Transvisco overlay comprises a 2-layer foam construction, with a high resilience combustion modified foam base, and a visco-foam upper layer. Cover access is via a zip on 3 sides. Cleaning instructions are marked on the cover. The overlay comes with an under-sheath to aid with evacuation.

Peak Interface Pressure (pelvis)	61 +/- 4mmHg
Peak Interface pressure (heels)	72 +/-9 mmHg
Heat transfer rate	18.2 +/-0.1 Wm ⁻²
Vapour transfer rate	618 +/- 5 gm ⁻² day ⁻¹
Longevity (% reduction Quince after 10 ⁵ cycles)	7 %
Fire retardancy*	BS 6807:1996 Source 0, 1, 5
Turning*	Rotate only
Supplier:	
Karomed, Millfield	
Chard	
Somerset	
TA20 2BB	
*Information provided by manufacturer	

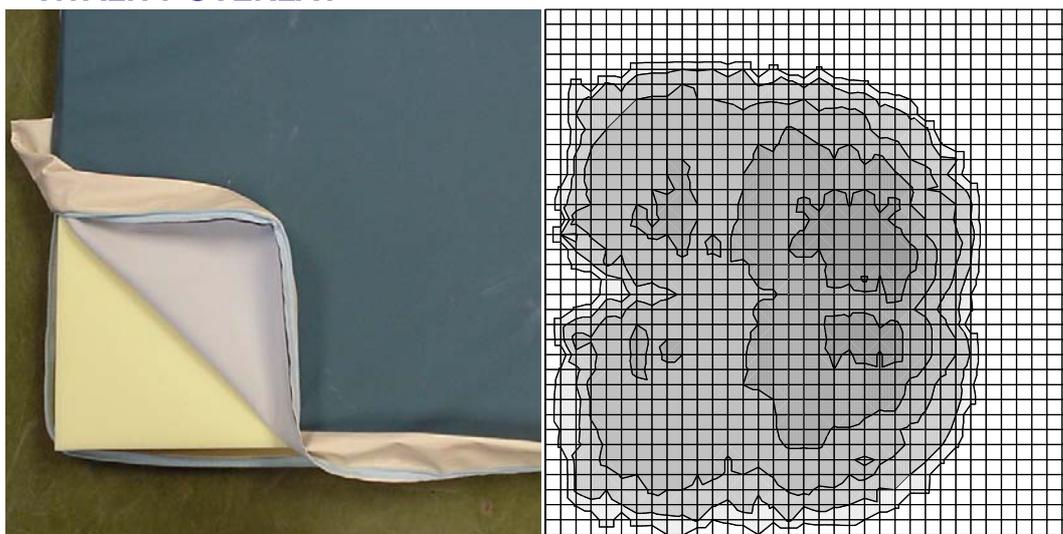
Evaluation

This is part of a series of reports relating to pressure reducing overlays, which are defined for these purposes as: supplementary mattresses designed for use on top of a standard mattress. with no actively powered parts. The first issue, MHRA 04101 - 0, constitutes a description and rationale for the criteria and test methods used to evaluate these products. In every case, the overlay is used in this report on top of a standard NHS Economy mattress.

Enquiries

For information on the SM series, please contact MHRA, Hannibal House, Elephant & Castle London SE1 6TQ. Tel: 020 7972 8181 E-mail: des@mhra.gsi.gov.uk

+ VITALITY OVERLAY



Pressure Map (10mmHg Isobars)

The Vitality comprises a solid block layer of viscoelastic foam. Cover access is via a zip on one end only, with a protective flap to prevent ingress. Cleaning instructions are marked on the cover. overlay does not require flipping, and top and bottom are clearly indicated.

Peak Interface Pressure (pelvis)	62 +/-4 mmHg
Peak Interface pressure (heels)	71 +/-9 mmHg
Heat transfer rate	18.4 +/-0.1 Wm ⁻²
Vapour transfer rate	644 +/- 7 gm ² day ⁻¹
Longevity (% reduction Quince after 10 ⁵ cycles)	7 %
Fire retardancy*	BS 6807:1996 Source 0, 1 and 5
Turning*	Rotate only
Supplier:	
Vitafoam Limited,	
Oldham Road, Middleton,	
Manchester,	
M24 2DB	
*Information provided by manufacturer	

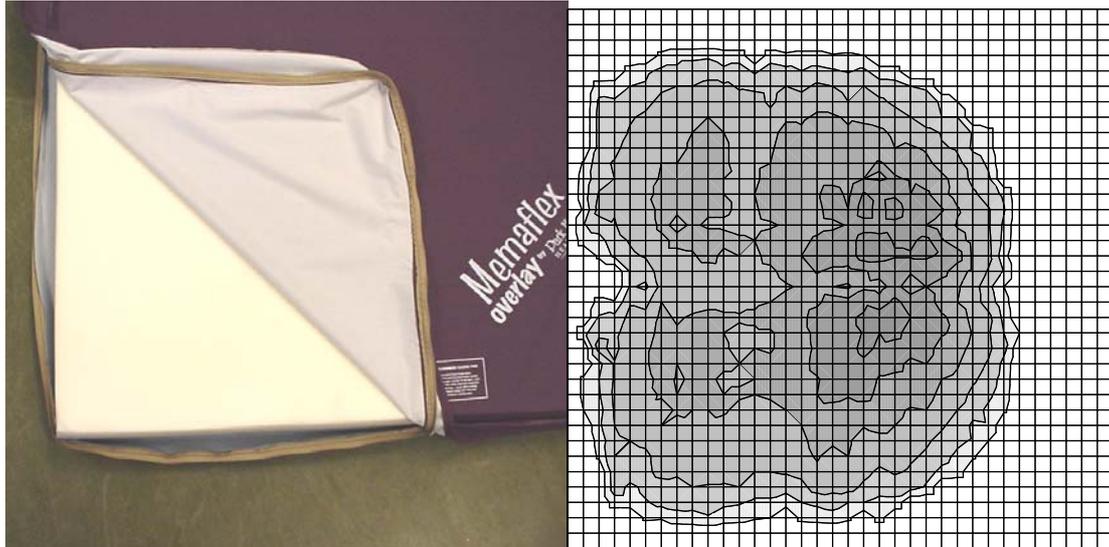
Evaluation

This is part of a series of reports relating to pressure reducing overlays, which are defined for these purposes as: supplementary mattresses designed for use on top of a standard mattress. with no actively powered parts. The first issue, MHRA 04101 - 0, constitutes a description and rationale for the criteria and test methods used to evaluate these products. In every case, the overlay is used in this report on top of a standard NHS Economy mattress.

Enquiries

For information on the SM series, please contact MHRA, Hannibal House, Elephant & Castle London SE1 6TQ. Tel: 020 7972 8181 E-mail: des@mhra.gsi.gov.uk

+ MEMAFLEX OVERLAY



Pressure Map (10mmHg Isobars)

The Memaflex comprises a 2-layer foam construction, with a high resilience combustion modified foam base, and a visco-foam upper layer. Cover access is via a zip on 3 sides. Cleaning instructions are marked on the cover.

Peak Interface Pressure (pelvis)	67 +/-5 mmHg
Peak Interface pressure (heels)	77 +/-11 mmHg
Heat transfer rate	19.9 +/-0.1 Wm ⁻²
Vapour transfer rate	645 +/- 4 gm ⁻² day ⁻¹
Longevity (% reduction Quince after 10 ⁵ cycles)	7 %
Fire retardancy*	BS 6807:1996 Source 0, 1 & 5
Turning	Rotate only
Supplier:	
Parkhouse Healthcare Ltd	
Park House, Bradford Road, Birstall	
Batley WF17 9PH	
*Information provided by manufacturer	

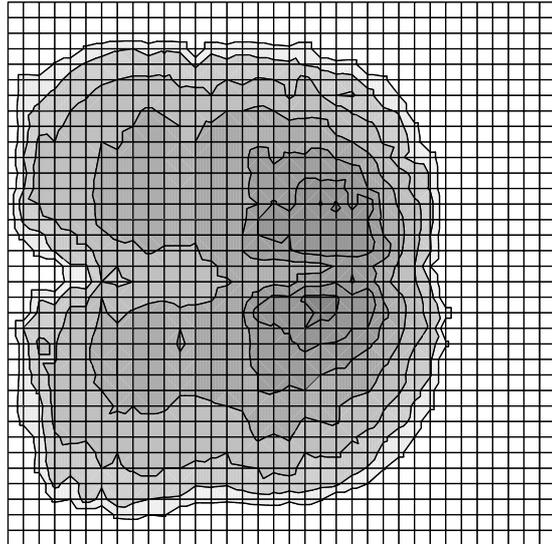
Evaluation

This is part of a series of reports relating to pressure reducing overlays, which are defined for these purposes as: supplementary mattresses designed for use on top of a standard mattress. with no actively powered parts. The first issue, MHRA 04101 - 0, constitutes a description and rationale for the criteria and test methods used to evaluate these products. In every case, the overlay is used in this report on top of a standard NHS Economy mattress..

Enquiries

For information on the SM series, please contact MHRA, Hannibal House, Elephant & Castle London SE1 6TQ. Tel: 020 7972 8181 E-mail: des@mhra.gsi.gov.uk

+ HARLEY DESIGNER OVERLAY



Pressure Map (10mmHg Isobars)

The Harley Designer overlay comprises a 2-layer foam construction, with a high resilience combustion modified foam base, and a visco-foam upper layer. Cover access is via a zip on 3 sides. Cleaning instructions are marked on the cover.

Peak Interface Pressure (pelvis)	73 +/-3 mmHg
Peak Interface pressure (heels)	77 +/-12 mmHg
Heat transfer rate	19.8 +/-0.1 Wm ⁻²
Vapour transfer rate	624 +/- 3 gm ⁻² day ⁻¹
Longevity (% reduction Quince after 10 ⁵ cycles)	7 %
Fire retardancy*	BS 6807:1996 Source 0, 1 and 5
Turning	Rotate only
Supplier:	
Spinal Products Ltd	
Harley House, Hill Road, Ripponden	
Halifax HX6 4DJ	
*Information provided by manufacturer	

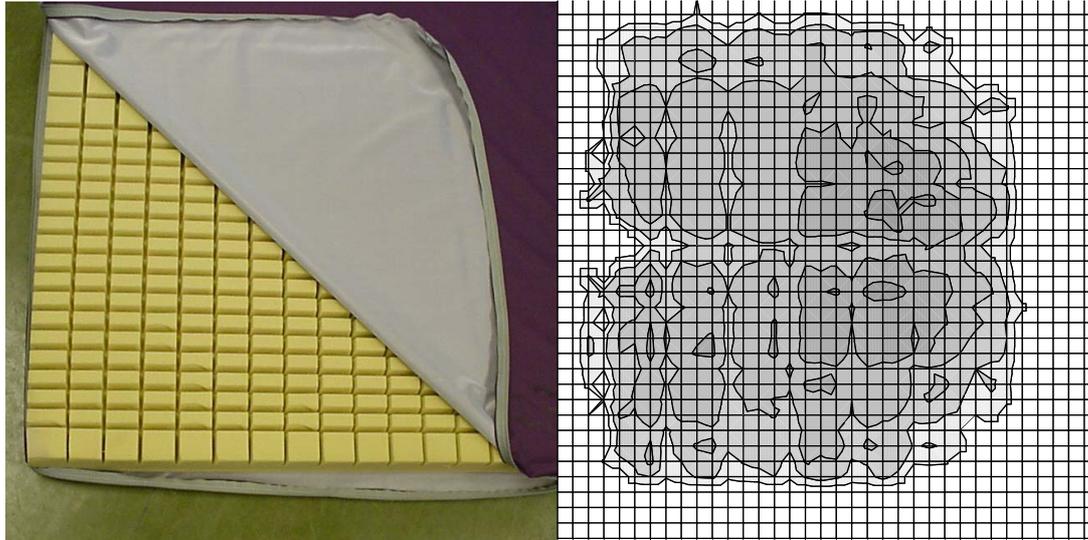
Evaluation

This is part of a series of reports relating to pressure reducing overlays, which are defined for these purposes as: supplementary mattresses designed for use on top of a standard mattress. with no actively powered parts. The first issue, MHRA 04101 - 0, constitutes a description and rationale for the criteria and test methods used to evaluate these products. In every case, the overlay is used in this report on top of a standard NHS Economy mattress.

Enquiries

For information on the SM series, please contact MHRA, Hannibal House, Elephant & Castle London SE1 6TQ. Tel: 020 7972 8181 E-mail: des@mhra.gsi.gov.uk

+ BASIX OVERLAY



Pressure Map (10mmHg Isobars)

The Basix overlay comprises a single block of high resilience combustion modified foam, with profiled squares in the surface that compress individually. Square size varies over the surface to reflect body regions with different levels of loading. Cleaning instructions are printed on the cover.

Peak Interface Pressure (pelvis)	58 +/-3 mmHg
Peak Interface pressure (heels)	63 +/-11 mmHg
Heat transfer rate	18.2 +/-0.1 Wm ⁻²
Vapour transfer rate	524 +/- 2 gm ⁻² day ⁻¹
Longevity (% reduction Quince after 10 ⁵ cycles)	4 %
Fire retardancy	BS 6807:1996 Source 0, 1, 5
Turning	Rotate only
Supplier:	
Spenco Healthcare International Ltd	
45 London Road, Horsham	
West Sussex	
RH16 1AN	

Evaluation

This is part of a series of reports relating to pressure reducing overlays, which are defined for these purposes as: supplementary mattresses designed for use on top of a standard mattress. with no actively powered parts. The first issue, MHRA 04101 - 0, constitutes a description and rationale for the criteria and test methods used to evaluate these products. In every case, the overlay is used in this report on top of a standard NHS Economy mattress.

Enquiries

For information on the SM series, please contact MHRA, Hannibal House, Elephant & Castle London SE1 6TQ. Tel: 020 7972 8181 E-mail: des@mhra.gsi.gov.uk