

# TEMPUR-MED<sup>®</sup> PRESSURE RELIEVING PRODUCTS

[www.tempurmed.co.uk](http://www.tempurmed.co.uk)



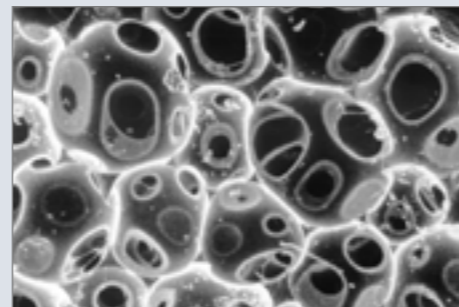
# WHY DOES TEMPUR® MAKE A DIFFERENCE?

## TEMPUR Material

The TEMPUR Material is a visco-elastic, temperature sensitive open cell material which has unique pressure relieving qualities. Unlike ordinary polyurethane which features irregular cell shapes that simply compress under weight and degenerate over a short period of time, the TEMPUR Pressure Relieving Material is composed of billions of visco-elastic spherical shaped, open cells. The cells respond to body temperature and weight then shift and reorganise their position to mould to the exact contours of the patient's body. The TEMPUR Pressure Relieving Material becomes softer in warmer areas and remains firmer in cooler areas, where less body contact is being made.

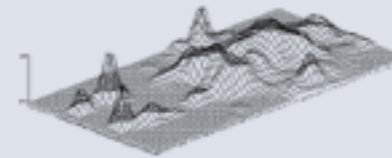
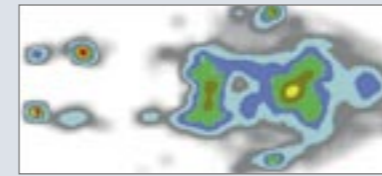


TEMPUR is an open cell visco-elastic, temperature sensitive material that conforms to the exact contours of the body.

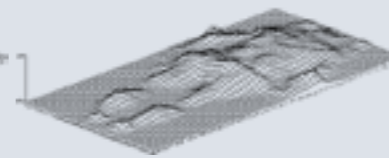


TEMPUR has a density of 85-110 kg/m<sup>3</sup>. The open cell structure allows air to circulate.

Standard Hospital Mattress



TEMPUR-MED Pressure Relieving Mattress



### PRESSURE DISTRIBUTION COMPARISON

Using an elastic blanket with pressure sensors connected to a PC, we have compared the pressure relief. The two illustrations show what happens when a person weighing 90 kg lies on a TEMPUR-MED Mattress, compared to what happens when they lie on a standard hospital mattress. The measurements show that the TEMPUR-MED Mattress is by far the best at relieving the body of pressure. (Test person was lying on the back).

### COMPUTERISED PRESSURE DISTRIBUTION COMPARISON

The light blue and blue show areas of low pressure. Yellow, orange and red show areas of where the body is subject to high, uncomfortable pressure.

TEMPUR-MED OVERLAY MATTRESS (7 CM)



TEMPUR-MED STANDARD HOSPITAL MATTRESS (14 CM)



TEMPUR-MED PREMIER MATTRESS (15 CM)



## TEMPUR-MED FACTS

- Optimum pressure relief
- Proper support and pressure relief over the entire surface
- High comfort
- High hygiene
- Easy to use
- Broad variety of application
- Minimal costs of maintenance
- Limited costs of investment
- Long durability
- Patient weight guidelines: 130 kg (options available).
- Available in all sizes
- Risk profile – up to high risk
- The mattresses conforms to all bed positions
- Proven care and cost effective in studies, clinical trials and practice all over the world

TEMPUR-MED – pressure ulcer prevention



All TEMPUR-MED products are covered with a waterproof and air permeable PU-cover. The PU-cover is welded to avoid leakage. The PU-cover, which is easy to remove, can be machine washed (95° C) and is easy to clean, disinfect and sterilise using cleaning agents commonly used in hospitals.

### ADVANTAGES OF THE PU-COVER:

- Stretchable
- Easy maintenance
- Easy cleaning
- High level of hygiene
- Constant high quality
- Washable in 95° C
- Vapour permeable
- Antibacterial treated

### REGULATIONS

All TEMPUR-MED Products with a PU-Cover comply to the following standards:  
Class 1 Medical Devices Directive 93/42/EEC.  
British Standard safety regulations, BS EN 597, parts 1 & 2, BS6807 and BS 7177.

# TEMPUR-MED STUDIES AND CLINICAL TRIALS

## Study on the effect of alternating mattresses and repositioning on the incidence of pressure ulcers by Vanderwee, K, Grypdonck, M & Defloor, Nursing Science, Ghent University, Ghent, Belgium.

504 patients admitted to 19 surgical, internal or geriatric wards in 7 Belgian hospitals were included if they were in need of prevention. To define this need, two methods were used randomly: Braden Scale or presence of non-blanchable erythema.

The patients were randomised into either an experimental or a control group. In the experimental group, patients were lying on an Alpha-X-Cell, Huntleigh Healthcare, UK. In the control group, patients were lying on a TEMPUR Mattress, Tempur-Pedic International, Inc., USA in combination with turning every 4 hours. Both groups had identical protocols.

### CONCLUSIONS:

There was no significant difference in incidence of pressure ulcers (grade 2-4) between experimental (15,6%) and control group (15,3%).

## A preliminary report of using the TEMPUR-MED Mattress at HealthSouth Rehabilitation Hospital of Colorado Springs, USA.

### INTRODUCTION:

With the goal of reducing and more accurately budgeting for the costs associated with pressure management device utilisation, while at the same time making efforts to improve services to the patient population in general, it was decided to convert the mattresses on all of the beds from traditional foam replacement mattresses to TEMPUR-MED therapeutic mattresses. This conversion was implemented December 1, 1999.

The purpose of this preliminary report is to prevent early, primarily anecdotal findings of whether or not the conversion was successful.

### CONCLUSIONS:

- During the measurement period only a single support surface rental was required. Medical and nursing staff observed that already satisfactory low incidence rates were reduced even further (3% to 0.5%). Through the life of mattress savings of £ 60,000 or 55% were predicted even if ongoing rental support surfaces were required.
- Given the short duration covered by this preliminary report, the projected rental utilization may have been heavily skewed by a single rental.
- Patients and nursing staff were generally accepting of the conversion mattress and specifically expressed preference over the old mattresses.

## A randomised clinical trial using different turning intervals as prevention of pressure ulcers. Tom Defloor, Mieke Grypdonck & Jeen Haalboom, University of Gent, Belgium, University of Utrecht, Netherlands, University Hospital of Utrecht, The Netherlands.

### CONCLUSIONS:

- Turning every 4 hours on a visco-elastic mattress is a more effective and less labour-intensive method than the traditional 2- or 3-hours turning scheme.
- Turning has no preventative effect on the development of stage pressure ulcer.

## The Effects of a TEMPUR Mattress on Reducing insomnia in Patients with Fibromyalgia (an exploratory study, Young M.)

### CONCLUSIONS:

The averages indicate improvements in sleep quality, hours of sleep, and reduction in pain levels experienced while sleeping. The preponderance of comments offered by the subjects was indicative of enhanced quality of life.

## Wheelchair Cushion Efficacy. Western Journal of Nursing Research, 2000, 22 (3), 335-350.

In a laboratory setting, interface pressure of 29 cushions and a sheepskin were measured on 20 healthy volunteers.

### CONCLUSIONS:

Only 13 cushions had any pressure relieving effect. The pressure relieving effect appears to vary greatly between the cushions tested. The gel cushions appear to have no interface pressure relieving capacity. In the category of foam and air cushions, there are cushions available that provide an interface pressure reduction of 19,1% and others that increase interface pressure by 38,8%.

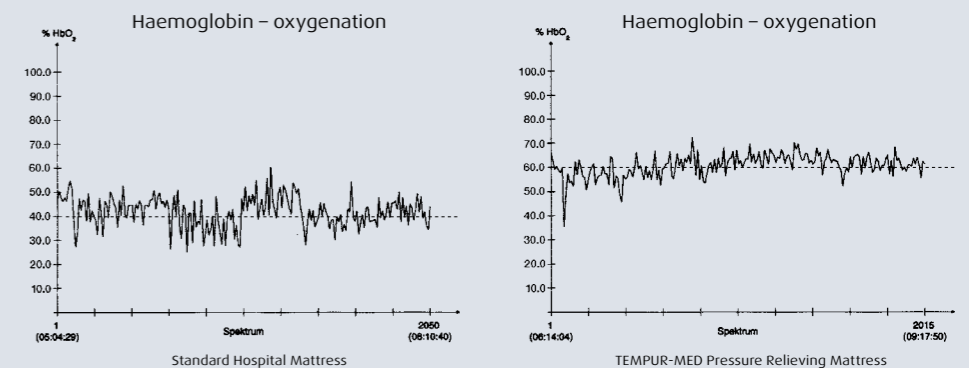
For further studies and clinical trials, visit:

[WWW.TEMPURMED.CO.UK](http://WWW.TEMPURMED.CO.UK)

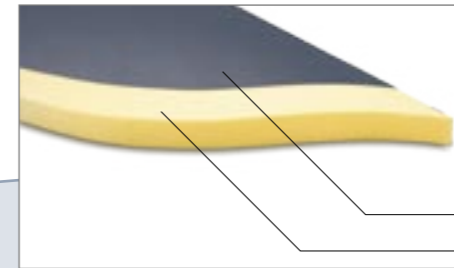


## BETTER BLOOD FLOW AND OXYGENATION

A laser spectroscopic study showed that the Haemoglobin oxygenation on subjects lying on a TEMPUR Mattress for 3 hours did not change. Compared to other surfaces, TEMPUR provides a quantitative and qualitative better blood flow. The blood flow showed an increase of 10-15% on the TEMPUR Mattress. The haemoglobin oxygenation was 60% compared to 40% on the standard mattress.



# HOSPITAL MATTRESS



PU-Cover  
7 cm TEMPUR Material

## TEMPUR-MED OVERLAY MATTRESS (7 CM)

- The TEMPUR-MED Overlay Mattress can be placed on top of any conventional hospital mattress.
- 7 cm visco-elastic temperature sensitive TEMPUR Material.
- The TEMPUR-MED Overlay Mattress is equipped with a liquid proof and vapour permeable hygienic cover.

### REGULATIONS

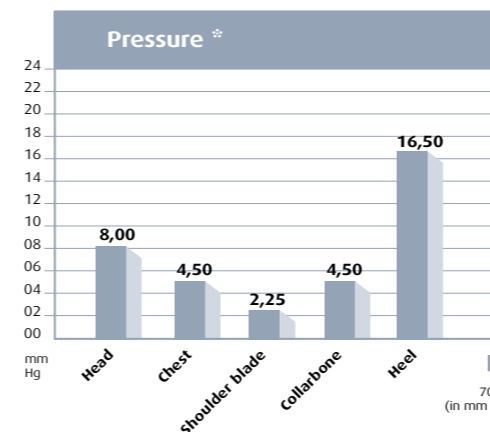
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British Standard safety regulations, BS EN 597, parts 1 & 2, BS6807 and BS 7177.



### TEMPUR-MED OVERLAY MATTRESS

The TEMPUR-MED Overlay Mattress can be used in wards when special attention to risk patients is required. In home care the TEMPUR-MED Overlay Mattress is being used for heavy, elderly or terminal patients to prevent pressure ulcers.

The TEMPUR-MED Overlay is placed on top of the existing mattress and the unique visco-elastic TEMPUR Material provides the required pressure relief.



### PRESSURE POINTS ON A PATIENT (70 KG) PLACED ON A TEMPUR-MED OVERLAY MATTRESS

The visco-elastic and thermo active properties ensures optimal pressure relief. Patients that are placed on the TEMPUR-MED Overlay Mattress mould into the material due to body temperature and weight. The body weight is absorbed and distributed. The pressure is distributed over the entire surface, thus reducing the risk of pressure ulcers.

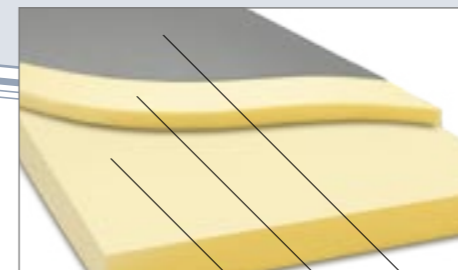
\* Basis Institut/TÜV Product Service GmbH, Munich, Germany

# HOSPITAL MATTRESS



## TEMPUR-MED STANDARD HOSPITAL MATTRESS (14 CM)

- The TEMPUR-MED Standard Hospital Mattress replaces a regular mattress.
- The flexible PU-cover is waterproof and welded.



PU-Cover  
4 cm TEMPUR Material  
10 cm highly resilient foam

### TEMPUR-MED STANDARD MATTRESS (14 CM)

The TEMPUR-MED Standard Mattress is specially made for systematic pressure ulcer prevention. When used in hospitals and nursing homes, this mattress contributes to efficient pressure ulcer prevention management.

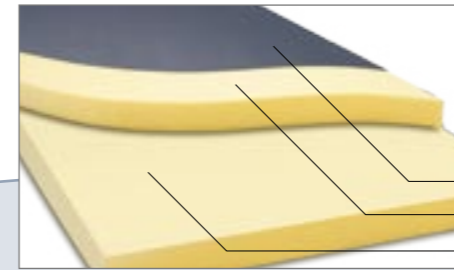
The quality and performance makes the TEMPUR-MED Standard Mattress suitable for most patients.



#### REGULATIONS

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# HOSPITAL MATTRESS



PU-Cover  
7 cm TEMPUR Material  
8 cm highly resilient foam

## TEMPUR-MED PREMIER MATTRESS (15 CM)

- The TEMPUR-MED Premier Mattress replaces a regular mattress.
- The flexible PU-cover is waterproof and welded.

### REGULATIONS

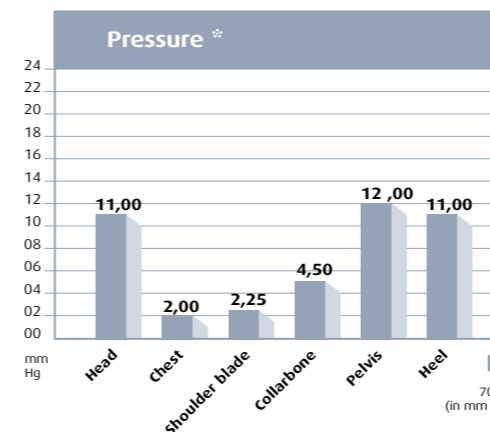
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British Standard safety regulations, BS EN 597, parts 1 & 2, BS6807 and BS 7177.



### TEMPUR-MED PREMIER MATTRESS (15 CM)

When special focus on risk patients is required, like in intensive care units the TEMPUR-MED Premier Mattress is the obvious choice. The 7 cm layer of TEMPUR Material combined with 8 cm high resilient foam provides optimum pressure relief and comfort for the patient.

The TEMPUR-MED Premier Mattress is used in intensive care wards as well as hospital departments with long-term patients, elderly patients and patients already suffering from pressure ulcers.

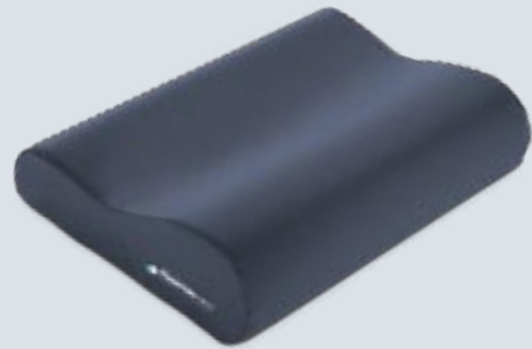


### PRESSURE POINTS ON A PATIENT (70 KG) PLACED ON A TEMPUR-MED PREMIER MATTRESS

The visco-elastic and thermo active properties ensures optimal pressure relief. Patients that are placed on the TEMPUR-MED Premier Mattress mould into the material due to body temperature and weight. The body weight is absorbed and distributed. The pressure is distributed over the entire surface, thus reducing the risk of pressure ulcers.

\* Basis Institut/TÜV Product Service GmbH, Munich, Germany

# PRESSURE RELIEVING PILLOWS



## TEMPUR-MED ORIGINAL NECK PILLOW

The TEMPUR-MED Neck Pillow provides an anatomically correct positioning by moulding to the contours of the head and shoulders. The TEMPUR-MED Neck Pillow gives maximum support and pressure relief. It is used as a stabilising, pressure relieving head support to minimise the risk of pressure ulcers on the back of the head and the shoulder area.

**Size:** 50 x 31 x 10/7 cm



## TEMPUR-MED TRADITIONAL PILLOW

The TEMPUR-MED Traditional Pillow can be used as a regular neck pillow or to position patients in the correct position. The unique composition of the pillow makes it extremely flexible in use.

**Size:** 74 x 50 cm



## TEMPUR-MED VEIN CUSHION

TEMPUR-MED Vein Cushion for improving circulation and relieving pressure on heels. It can improve blood circulation and is especially good for persons with poor circulation. The Vein Cushion is particularly well suited for relieving pressure on heels. It is available both with a velour cover and an incontinency cover.

**Size:** 75 x 50 x 10/0 cm



## TEMPUR-MED LEG SPACER (DOUBLE)

TEMPUR-MED Leg Spacer (double) has two uses: folded together between the legs, thereby relieving pressure on the legs. Unfolded under the ankles, thereby relieving pressure on the heels.

**Size:** 27 x 20 x 20 cm



## TEMPUR-MED UNIVERSAL PILLOW

TEMPUR-MED Universal Pillows are well suited for positioning purposes. For relaxed, pressure relieving support for the neck, thorax, arms, knees and feet.

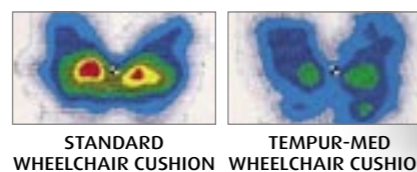
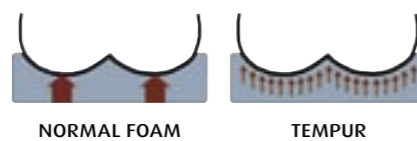
**Size:** 50 x 20 x 10 cm  
**Size:** 35 x 20 x 10 cm  
**Size:** 40 x 16 x 8 cm  
**Size:** 40 x 15 x 6 cm

### REGULATIONS

All TEMPUR-MED Products with a PU-Cover comply to the following standards:  
 Class 1 Medical Devices Directive 93/42/EEC.  
 British Standard safety regulations, BS EN 597, parts 1 & 2, BS6807 and BS 7177.

## WHEELCHAIR CUSHIONS

The TEMPUR-MED wheelchair cushion helps to establish 24-hours pressure area care by providing maximum support and stability to patients sitting out of bed, with a multi-stretch, vapour-permeable cover that reduces friction.



The light blue and blue show areas of low pressure. Yellow, orange and red show areas where the body is subject to high, uncomfortable pressure.



## WHEELCHAIR CUSHION

**Standard sizes:**  
 40 x 40 x 5 cm  
 43 x 43 x 5 cm  
 45 x 40 x 5 cm



## WHEELCHAIR CUSHION

**Standard sizes:**  
 40 x 40 x 7,5 cm  
 43 x 43 x 7,5 cm  
 45 x 40 x 7,5 cm



## WHEELCHAIR CUSHION, CURVED

**Standard sizes:**  
 40 x 40 x 9/5 cm  
 43 x 43 x 9/5 cm  
 45 x 40 x 9/5 cm

# WHY CHOOSE TEMPUR-MED?

## CARE AND COST EFFECTIVE

### IMPROVE CARE SAVE MONEY

The TEMPUR-MED Mattress provide a preventative solution for the reduction in pressure ulcers, and their longevity means that you will need to replace them less often than a standard hospital mattress.

### NO TURNING REQUIRED

The TEMPUR Mattress should not be turned. This reduces the scope for manual handling injuries compared to conventional mattresses, which require regular turning to avoid sagging.

### THE PREVENTATIVE BENEFITS

The preventative features of TEMPUR-MED Mattresses alleviate the need to hire expensive alternating systems. It can be used for all class of patients from low to very high risk, by providing support for the entire body reducing the risk of pressure ulcers.



## GUARANTEE

All TEMPUR-MED Products come with the following guarantee:

- 3 years for pillows
- 3 years for PU-covers
- 6 years for mattresses \*

The guarantee covers physical defects or changes causing visible, permanent deformation (more than 2 cm) in the TEMPUR Material. The guarantee does not cover normal changes in hardness or properties that do not affect the pressure-relieving properties of the product. The guarantee is valid only if the TEMPUR Product is used and handled in accordance with these directions.

The guarantee does not cover damage to the TEMPUR Material caused by a leak in a cover that is more than 3 years old or a damaged cover.

#### \* Pro rata

- 0-3 years: Full guarantee
- 3-4 years: The guarantee is reduced by 10%
- 4-5 years: The guarantee is reduced by 30%
- 5-6 years: The guarantee is reduced by 60%

More than 6 years: No guarantee

## FREQUENTLY ASKED QUESTIONS ABOUT TEMPUR-MED

### HOW CAN THE PU-COVER BE CLEANED?

The TEMPUR-MED Products are equipped with liquid proof, vapour permeable hygienic covers. The covers can be machine washed (95° C) or cleaned with standard hospital disinfectants.

### ARE THE TEMPUR PU-COVERS PERMEABLE TO FLUIDS AND BACTERIA?

The PU-covers let air and vapour through, but not fluids or bacteria.

### ARE THE TEMPUR PRODUCTS SAFE FROM A HYGIENIC ASPECT?

The seams in the covers are fully welded to prevent fluids from entering the products. To ease removal the cover is equipped with a zipper that is fully covered.

### ARE THE TEMPUR PRODUCTS SUITED FOR PRESSURE ULCER PREVENTION AND TREATMENT?

Several studies prove that TEMPUR is well suited for this purpose. For further information please visit [www.tempurmed.co.uk](http://www.tempurmed.co.uk)

### WHAT REGULATIONS DO TEMPUR-MED PRODUCTS COMPLY TO?

The TEMPUR-MED Products are CE marked Class 1 Medical Devices and meet the standards laid down in Directive 93/42/EEC. In addition, the TEMPUR-MED Products with a PU-Cover complies with the British Standard safety regulations, BS EN 597, parts 1 & 2, BS6807 and BS 7177.

### HOW MANY TIMES CAN THE COVER BE WASHED?

The PU-cover can be washed up to 50 times before it must be replaced.

### CAN THE TEMPUR MATERIAL BE WASHED?

The TEMPUR Material can not be washed. To ensure that bacteria and fungus cannot grow in the material a special agent is used to prevent the growth of micro organisms.

[www.tempurmed.co.uk](http://www.tempurmed.co.uk)





THE ONLY MATTRESS AND  
PILLOW RECOGNIZED BY  
NASA AND CERTIFIED BY  
THE SPACE FOUNDATION

## TEMPUR IN BRIEF

Tempur-Pedic International, Inc. is an international company that specialises in developing, producing and selling products manufactured from the unique TEMPUR Material. TEMPUR is a high-tech, visco-elastic material, originally developed by NASA for the American space programme in the 1970s. TEMPUR acquired the rights to manufacture the material at the end of the 1980s, and at the start of the 1990s our production engineers successfully developed a high-quality process for the manufacturing of the TEMPUR Material. This paved the way for transferring NASA's technology to use in private homes and in the health sector throughout the world.

TEMPUR Products for the health sector are launched under the international name: TEMPUR-MED.

**Shiloh**

◆ HEALTHCARE

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**Website:** www.shiloh.co.uk



The TEMPUR-MED Products  
are CE-marked Class 1  
Medical Devices and meet  
the standards laid down in  
Directive 93/42/EEC.

