



Bed systems: are you comfortable?

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“Lying down is easy ... ‘lying down comfortably’ is a different matter.”

(Dr. Heidinger, Munich)

Bearing in mind that there are so many different sleep systems to choose from, this brochure aims to help you decide between the multitude of mattresses, bed bases and pillows and could consequently make choosing a good bed system easier for you.

An effective sleep system is entirely personal and depends upon your preferred posture, body size and sleeping environment. Recent sleeping trends consequently focus on individual sleep systems, on the basis of height, weight, stature and distribution as well as comfort and personal needs.

Scientific studies have demonstrated the importance of correct support for the spine. Proper support, particularly when lying on your side, has a positive impact on sleeping patterns and comfort. The more personalised this support, which should also be guaranteed when you change position, the better your quality of sleep.

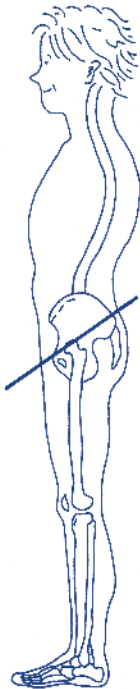
This brochure consequently aims to provide you with more information on the various bed systems available, with a summary at the end of poor, better and excellent support systems, all based on scientific research and our many years of experience.

IMPORTANCE OF GOOD POSTURE, MOVEMENT AND A SUPPORTIVE SLEEP SYSTEM

POSTURE AND MOVEMENT OF THE SPINE

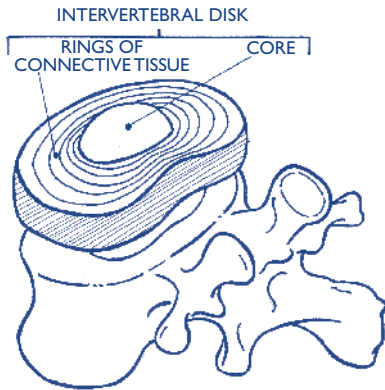
The spine consists of three curvatures that combine into an S-shape:

- 1 slight inward curvature of the 7 neck vertebrae (cervical lordosis)
- 2 slight outward curvature of the 12 thoracic vertebrae (thoracic kyphosis)
- 3 slight inward curvature of the 5 lower back vertebrae (lumbar lordosis)



These curvatures ensure that there is an optimum balance between the flexibility and rigidity of the spine.

Each intervertebral disk between two adjacent vertebrae consists of a liquid core surrounded by approximately 16 layers (rings), which make up a strong overall arrangement. Standing or remaining in the same position for a long time leads to moisture escaping from the core into the surrounding blood vessels. This means that by the end of the day, or following a period of little movement, there will be less fluid in the intervertebral disks, making us less able to absorb pressure and less flexible. Bad posture (e.g. slouching, head too far forward) will also



put pressure on the intervertebral disks, resulting in the core losing more fluid.

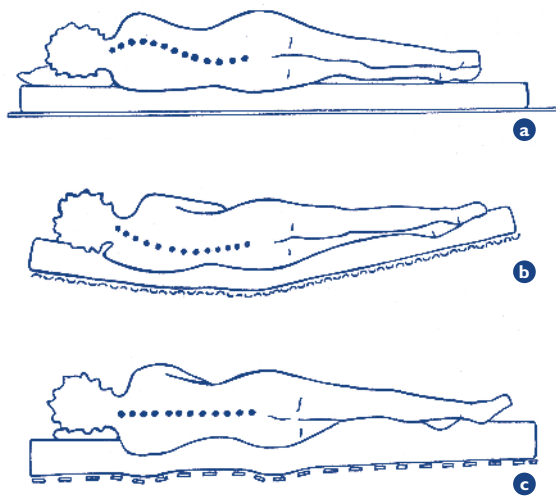
Extended deep sleep will ensure that the fluid returns from the blood vessels to the core so that we are properly ‘charged’ again in the morning.

PROPER SUPPORT WHEN LYING DOWN

With a normal physique the pelvis is usually slightly heavier than the shoulders, which in turn are typically wider than the pelvis. This means that the pelvis will put more pressure on the bed than the shoulders, resulting in sagging of the spine.

A good sleep system **c** will ensure that the pelvis cannot sag too much

and the shoulders can drop down a little more. This type of sleep system will have a **more rigid pelvic zone** and a **softer shoulder zone**, referred to as so-called **comfort zones**.



If the mattress base is too hard **a** the spine will not be properly supported and the shoulders will remain on top of the mattress,

because they are too light to compress the mattress and it cannot adapt to the shape of the body.

If the base is too soft **b** the pelvis will drop too far down, resulting in misalignment of the spine. This in turn will lead to reduced moisture discharge and lack of flexibility. After a while the mattress will develop a permanent compression.

MOVEMENT DURING SLEEP

We need to move whilst we are asleep to maintain blood flow in the muscles, to avoid excessive pressure in the same place and to allow the fluid to flow back to the intervertebral disks.

A sleep system should, therefore, make it easy for you to change position. Certain bed systems, such as a water bed or memory foam mattress (see below), are less inclined to stimulate movement. Too much movement, on the other hand, will result in disturbed, restless sleep, which is often the case with systems that are too rigid.

Moving around and maintaining the correct posture are consequently of vital importance for the moisture balance in intervertebral disks, also when you're asleep. It is advisable, therefore, to choose a sleep system that provides proper support for the three spinal curvatures and 'promotes' the right amount of movement during sleep.

IDEAL SLEEPING POSITION

The ideal sleeping position depends very much upon personal physique aspects such as weight and height. Just because lying on your back is a recommended sleeping position, it will not necessarily make you sleep well. Some positions, however, are recommended because they reduce the strain on the spine and facilitate effective support in bed.

Examples of good positions:

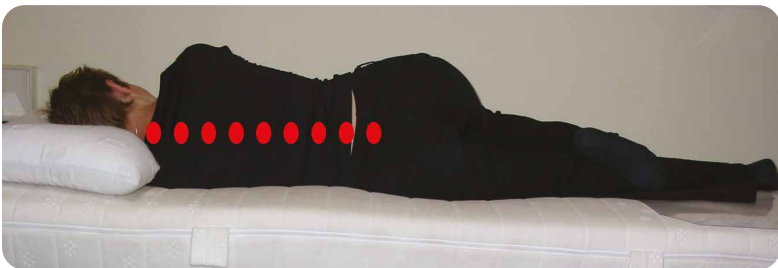
X **Sleeping on your back**

Lying on your back is an effective sleeping position because it promotes optimum distribution of the body weight across a large surface area.

X **Sleeping on your side**

Sleeping sideways with your knees slightly bent and the lower arm across the chest is an excellent sleeping position.

Lying sideways with the lower leg stretched out and the upper leg bent forward is also a recommended position. This is best combined with a pillow between the mattress and the upper knee.



Examples of poor sleeping positions:

X **Sleeping on your stomach**

We definitely don't recommend sleeping on your stomach because it will rotate your neck if you do so. This puts more pressure on the ligaments and muscles of the spine, whereas they should really be relaxed. It also increases the curvature in the lumbar region: your back will be too hollow. Sooner or later this position will cause back and/or neck problems.

X **Foetal position lying sideways**

If the spine is bent for a long time both during the day and at night more pressure will be exerted on the intervertebral disks and the rear structures of the back will be stretched too much. This constant stress can lead to loss of elasticity in the tissues so that you may get up with a stiff and aching back in the morning.

People sleeping on their back and side can rest assured: they move up to 60 times a night without being aware of it. People sleeping on their stomach tend to stay in the same position.

Sleeping with your arms behind your head or with the head resting on the arms can lead to painful shoulders or aching arms.

BUYING A SLEEP SYSTEM

Whether or not you buy a new sleep system will depend on the bed you have now. In view of the fact that we perspire at night, it is advisable, for reasons of hygiene, to replace your mattress every ten to fifteen years and your pillow every three to five years.

If you score more 'not good' than 'good' responses to the following questions, it may be time for a new sleep system.

	Not good	Good
When I get into bed ...	I tend to toss and turn for quite a while.	I soon get into my ideal sleeping position.
When I wake up in the night ...	my mattress feels damp.	my mattress doesn't feel too damp, warm or cold.
When I turn in my sleep ...	my partner turns also or rolls towards me.	my partner sleeps on undisturbed.
The location where my hip touches the mattress ...	is so soft that it seems as if I am completely compressing the mattress.	has a similar rigidity as the other parts of the mattress.
When I get up ...	my legs and/or my back are stiff.	both my legs and my back are relaxed.
During the night ...	I regularly wake up and toss and turn.	I am undisturbed and in deep sleep.
When I make my bed ...	my mattress looks unhygienic and stained.	my mattress looks clean and fresh.
When I wake up in the morning ...	I have pins and needles in my arms, neck pain and a headache and I feel wretched.	I feel refreshed.

BED PROPERTIES

The quality of a sleep system is determined by a number of properties. The more different properties a system incorporates, the better the quality and comfort it offers. Always ask about the bed's properties before buying a new bed system.

Conformity

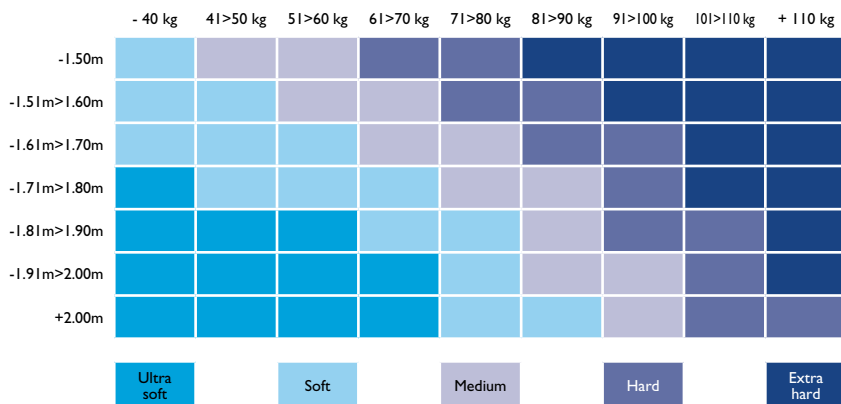
This indicates how a sleep system adapts to people's physique. A higher level of conformity indicates that the different curvatures of the spine are better supported. If the under layer is too soft or too hard conformity will be low.

Comfort whilst lying down

Hardness

Is mainly determined by the mattress. A hard mattress will yield less than a soft mattress. Body weight plays a part when choosing the hardness of a mattress: people with a higher body weight will need a harder mattress than people with a lower body weight. Studies have shown that a mattress which is too soft causes back and shoulder problems.

It is advisable for couples to opt for two individual sleep systems and/or two different mattresses. The table below provides an indication of mattress hardness on the basis of body weight and height. But remember: these are merely guidelines; your personal comfort and perception also play a part in the hardness selection process.



Thickness

Similar to the hardness, the thickness of a mattress will also determine the extent to which the body sinks into it. A thicker mattress will be more comfortable than one which is too thin. The mattress thickness will also depend upon the type of bed base used. The mattress and bed base combine in to a single unit with a perfect match to ensure that the body gets maximum support.

Currently available mattresses vary in thickness between 13 and 25 cm. A feather mattress is often up to 22 to 25 cm thick. A foam mattress may be up to 13 to 17 cm thick, providing it is placed on a base that offers effective support.

Heat insulation

Successful heat insulation is important to ensure that you don't cool down too much during the night (which can lead to muscle stiffness and poor sleep) or don't perspire excessively. Maintaining a more or less constant body temperature whilst you are asleep is important. The optimum bed temperature should ideally vary between 28°C and 30°C. The degree of heat insulation will also depend on your personal preference. People with back problems often perceive heat as beneficial.

Heat regulation

Because a relatively constant body temperature is important for a good night's sleep, not all the heat emitted by the body should be stored in the mattress. Successful ventilation and heat regulation will ensure that some of the heat is dissipated and the body temperature doesn't rise. However, the mattress also has to store some heat to prevent the body from cooling down. It is mainly the core of the mattress that determines how much body heat you lose to the mattress and how warm the bed consequently feels. That is why a feather mattress feels 'colder' than a natural latex mattress.

Moisture absorption and permeation

The moisture absorption rate indicates how quickly and efficiently a mattress absorbs moisture. This is mainly determined by the top layers of a mattress and the cover around it. Often the top layers consist of wool, cotton or silk.

The moisture permeation rate indicates how easily the mattress allows moisture to permeate and disperse. A latex mattress will allow less moisture to permeate than a feather one.

Maintenance

A mattress must be properly aired on a regular basis, both the top and bottom side. It is also advisable to occasionally (every three months) rotate a mattress in longitudinal and width direction to prevent sagging. Of course this may not always be possible if the mattress has specific comfort zones.

Stability

A sleep system should not 'wobble' when the sleeper moves position as this would put too much strain on the muscles.

Durability

Depending on its quality, a mattress will last ten to fifteen years. The main problem is that the mattress loses flexibility over the years.

Bed comfort

Dimensions

Height: the optimum bed length is 20 to 30 cm longer than a person's height. If you are 1 m 70 a bed length of 2 m will be more than adequate. However, if you are 1 m 90 it would be advisable to choose a 2 m 20 long bed.

Width: 90 cm is a minimum to sleep comfortably.
Minimum width = shoulder width + 40 cm.

Height: a specific standard height (minimum 45 cm or: the edge of the mattress should be a few centimetres above the hollow of the knee) is needed to comfortably get in and out of bed.

EXISTING SLEEP SYSTEMS

A sleep system consists of a mattress base, a mattress and a pillow. The combination of these three elements will determine the quality of the sleep system. The following is a description of the individual existing elements, followed by a second part in which the combination of mattress base and mattress is highlighted with its associated advantages and disadvantages.

Mattress base

A mattress base should ensure that the mattress doesn't sag, i.e. it definitely has to offer enough flexibility. It must also be strong and durable, and allow sufficient moisture to permeate. Moreover, certain bases, depending on the type of mattress, benefit from a soft shoulder zone and more rigid pelvic zone (see above).

The mattress base may consist of a [slatted base](#), a [flex \(plate\) bed base](#), a [fixed base with winged elements](#), a [metal sprung base](#) or a [box-spring base](#).

Slatted base

There are currently three types of slatted bed bases available.

- [Wooden slats with rubber suspension](#)
- [Glass fibre slats with steel suspension](#)

Contrary to some other types of bed base, a slatted base can provide individual support.

The wooden or glass fibre slats are assembled in a wooden or steel frame and fixed onto fixed or sprung, tilting points. Their conformity is improved by mounting the slats in pairs onto rubber, tilting supports.



A good quality slatted base will offer support across the entire width of the base to ensure that you are lying comfortably not only in the centre section but also when you turn to the side.

A good quality slatted base should also follow the contours of the body and preferably be divided into different **support zones**: a more rigid zone for the pelvic area and a softer zone for the shoulders.



In most cases you can fine-tune these zones yourself by adjusting the slats horizontally and/or vertically.

Slatted bases are available in various options (level, manually and electrically adjustable) and qualities. It is always advisable to choose two separate slatted bases for a double bed to provide the correct personal level of support for each sleeper.

In most cases a level base without adjustment options will more than suffice for your back. A slatted base, which can be adjusted in the leg area, may be useful if you like to have a rest in your bed. We don't recommend adjustment of the head area: it will increase the strain on your neck. It may be beneficial to tilt up the entire torso, providing you use a good quality pillow to support your head and provide correct lumbar support (e.g. a pillow). You can also read in this position. Other positions to read in bed are not recommended.



Some people are advised to slightly tilt the entire bed so that the head is positioned slightly lower than the feet. This is referred to as the Trendelenburg position, which improves the flow of fluid to the heart. The opposite is often recommended for people (or children) suffering from reflux, whereby the head is positioned higher than the feet.

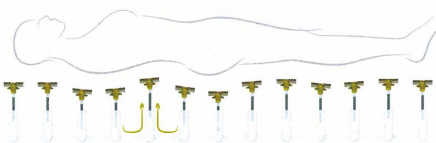


- Slatted base with hydraulic pump system

The hydraulic pumps are connected so that they operate like communicating vessels. When the pelvis and shoulders put pressure on the pumps, the slats in other areas are raised to ensure that the body has optimum support again and the natural curvature of the spine is maintained. Because the system cannot be adapted to the weight and width of a person, someone with a heavy pelvis, for example, will sag quite deeply, which can only be partly compensated by lumbar support. If that same person has light and wide shoulders, they will not sag enough creating support with a hammock effect.

The 'flow sleeping' system is also based on this principle.

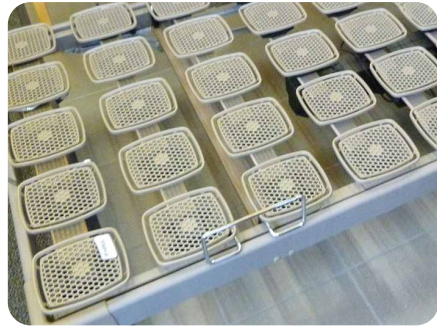
With flow form bases the various zones are linked so that they operate like communicating



vessels: the heaviest parts sag deeply and the lighter parts are pushed up.

Flex (plate) base

The 'plates' have a large contact surface with the mattress. This provides better and more evenly distributed support for the body. The plates are open in design to promote effective moisture regulation. This type of base also incorporates support zones, which ensure that both the shoulders and the hips are properly supported. This type of base is often recommended in combination with a memory foam mattress (see below).



Mattress support with winged elements

The double winged elements on the mattress base are fixed to sturdy cross pieces and can move in any direction. They are also equipped with support points, which create counter pressure exerted by the person's weight and movements whilst asleep.

The number of support points depends on the type of base. Usually there are two to four support points for each mattress base. The winged elements are flexible and can be individually adjusted.



Metal sprung base

Metal sprung bases are made up of a mesh of interconnected 'iron wires'. There are two types of metal sprung bases: bases with crossways or with longitudinal tensioned mesh. Crossways tensioned mesh bases provide more support than longitudinal ones. They have a longer service life and provide adequate ventilation. The disadvantage is that they are hard and can never provide good support on their own. The best option is a combination with a feather mattress.



Box spring

A box spring consists of a wooden frame that holds hundreds of metal springs. It is a sub mattress with a large number of interconnected, vertical inner springs with different resistances, depending on where they have to absorb more or less pressure. The spring box itself doesn't provide enough support and consequently has to be combined with a feather mattress to provide the correct support. There are two types of box springs: a box spring with Bonnell springs and a box spring with pocket springs. Bonnell springs have a large diameter and few windings. Pocket springs are packed in individual pockets. They have a small diameter and more windings, and consequently provide better support. We would recommend pocket springs for comfort and a good night's sleep.

Mattress

A mattress consists of a core with one or more layers of padding fitted inside a cover (ticking). This padding may consist of wool, cotton or silk. Horse or camel hair is also often used as a top layer.

X **Wool**

good heat insulation

X **Silk**

cool

no heat insulation

good ventilation

better for people with a dust mite allergy

X **Cotton**

less heat insulation

good ventilation

skin friendly

Always remember to turn over your mattress every three months and ask in the shop whether this is possible with the type of mattress you are thinking of buying. Some mattresses are constructed in such a way that they don't need to be turned over.

There are three types of mattresses: [foam mattresses](#), [sprung mattresses](#) and [mattresses filled with water, straw or another material](#). A new type of mattress, the [modular mattress](#), was recently introduced to the market.

Foam mattresses

- Polyurethane mattress

Polyurethane (or polyether) mattresses consisting of 100% synthetic foam are the cheapest type available. However, they have few specifically beneficial properties and only provide moderate support.

The comfort and durability is primarily determined by their specific gravity (SG), the weight of the raw materials per cubic meter of foam. For example, a mattress with SG 20 contains foam weighing 20 kg/m³. A higher specific gravity will increase the durability of the mattress. If you are thinking of buying this type of mattress, you should ensure that it has a minimum thickness of 14 cm and density of 35 kg/m³.

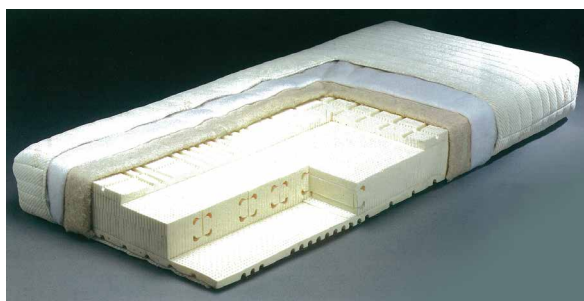
- Cold foam mattress

Cold foam (or HR – high resilience foam) mattresses are also made of polyurethane foam, but the cells distribute the pressure better than in ordinary polyurethane mattresses. They offer more flexibility and increased durability. Because this material has more open pores it has better breathing and moisture regulating properties than polyurethane foam. Another advantage: compression/indentation is virtually eliminated, particularly in combination with a well-ventilated mattress base. However, they still only provide moderate support for the body.

- Latex foam mattress

Latex is a foam rubber. A latex mattress may consist of 100% synthetic latex or a combination of natural (up to 80%) and synthetic (20%) latex.

The main advantage of latex mattresses is that they are very flexible and particularly durable. Depending on the type of latex used and the presence of air pockets, these mattresses may vary from exceptionally soft to quite rigid. They are also flexible enough to be used on adjustable mattress bases. Natural latex breathes more effectively and is more flexible than synthetic latex. Because of its breathing properties, a mattress consisting mainly of natural latex will allow more moisture to permeate.



Some latex mattresses incorporate a soft shoulder zone and a reinforced pelvic zone. The mattress hardness can be adapted to the user's body weight.

A more recently introduced product is a Talalay Perfolatex mattress. Talalay latex is based on a combination of natural and synthetic latex. The latex foam has a particularly open cell structure, which benefits the flexibility, ventilation and comfort of the product. Due to the production process this type of mattress is slightly more expensive than an ordinary latex mattress.

- Memory foam mattress

Memory foam mattresses are made of visco-elastic polyurethane foam, which softens when the temperature rises, i.e. when the body comes into contact with the mattress it will soften and compress more. This 'shapes' the mattress, which then follows the contours of the body. Because the pelvis is heavier than the shoulders, it will push down more on this type of mattress resulting in a hammock effect. An effective support base with a reinforced pelvic zone is, therefore, a necessity in this combination, although the base can never completely compensate for the disadvantages of the mattress.

Another disadvantage is that the material hardens in a cold environment. In the summer, on the other hand, it may become too supple. That is why it is advisable to maintain a constant room temperature. The lack of ventilation, sagging of the pelvis and different levels of hardness during temperature fluctuations mean that this type of mattress is not really ideal.

Memory foam is often also referred to as Tempur, NASA foam, slow motion foam and/or lazy foam.

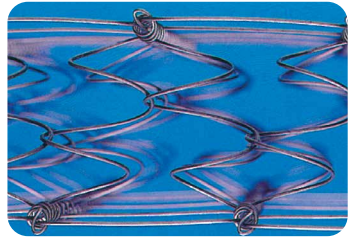
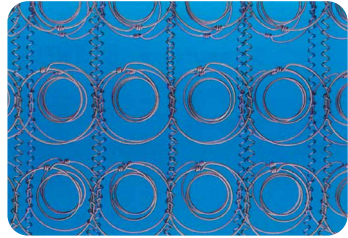
Sprung mattress

The core of a sprung mattress consists of a large number of steel springs. The advantage of this type of mattress is that it can be adapted to body weight.

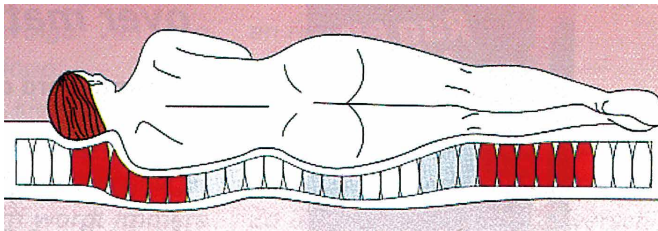


Sprung mattresses can be combined with a sturdy base such as a box spring or coil sprung base. Three types of spring are available:

- **Bonnell or biconic spring:** consists of five windings. These springs are wider at the top and bottom than in the centre. Bonnell springs are interconnected. The heavier the body weight the more rigid the spring will be. They are more rigid than other types of spring.
- **Endless spring core:** consists of a single continuous woven steel wire.



- **Pocket spring:** barrel shaped spring with five windings individually packed in textile pockets. Because the springs are packed individually and aligned in rows, the mattress is particularly flexible and bendable, and has excellent load bearing properties. A pocket spring mattress can be equipped with a reinforced pelvic zone and softer shoulder zone. Due to its airy structure a pocket spring mattress has good ventilation properties, a particular benefit for people who perspire a lot.



The most recent addition to this range is a mini-pocket spring mattress, in which the springs have a smaller diameter than ordinary pocket springs resulting in more springs per square metre. The number of springs in a mattress determines how accurately it can adapt to your body.

Combination mattress

A combination mattress is based on a combination of springs and foam. It offers excellent ventilation, heat insulation, elasticity and comfort properties.

Water bed

A water bed allows the pelvis to drop down more than a normal mattress and consequently creates a hammock effect. You will move less in a water bed and it has poor moisture regulation properties. If you do wish to sleep on a water bed for medical reasons, it is advisable to use a system with two individual single water mattresses. Water beds are stabilised to a high, semi or low level, which determines the degree of water motion after you've moved. Some arthritis sufferers feel that the temperature of a water bed is beneficial and alleviates their symptoms. This is not been proven scientifically, but looking at the many testimonials it does appear to be a bonus.

Modular mattress

The modular mattress was developed by engineers in the Biomechanics department at KU Leuven. It can be tailored to customers'

individual requirements. The mattress is 25 cm thick and consists of three layers with different properties surrounded by ticking:

1. a (bottom) foundation layer, consisting of pocket springs provides basic support for the body
2. a (centre) supporting layer consists of three interchangeable zones near the shoulders, waist and hips that can be individually adapted to the dimensions and weight of the different body parts, taking into account your favoured sleeping position
3. a comfort (upper) layer defines, for example, how the mattress feels; choice between memory foam, latex or cold foam

Specifically designed measuring technology is used to personalise each mattress. A biomechanical sleep model is created using mattress compression measurements when the person is lying on his/her back and on his/her side. The required hardness in the interchangeable zones (shoulders, waist and hip) of the supporting layer is then determined. Because these zones are exchangeable the mattress can still be modified after purchase (e.g. for individuals with specific back problems).



The mattress is compatible with any type of bed base (coil, slatted base, box spring, etc.) without any impact on the lumbar support it offers.

Pillow

Importance of a good quality pillow

A good quality pillow that supports the neck in various positions is vital.

It needs to fill in the hollow beneath the neck to minimise any strain on the neck. It also has to compensate for the level difference between the mattress and the head/neck. Your neck will suffer least strain when the head is aligned with the spine.



Even though there are pillows on the market for people who sleep on their stomach, we are purposely not including them here because we are convinced that lying on your stomach is not good for your back and/or neck.

The choice of pillow is dependent upon various factors:

X Your sleeping position

The pillow must not be too high for someone sleeping on their back. For someone sleeping on their side it must not be too high or too low. Determine for yourself which is the most comfortable.

X How hard is the sleeping system around the shoulder zone?

The pillow of a side sleeper must bridge the distance between the shoulders and neck vertebrae. If your mattress is harder, your shoulders will make less of an impression on the mattress. The pillow should fill in this gap and will often have to be slightly thicker than with a soft mattress into which your shoulders sink deeper.

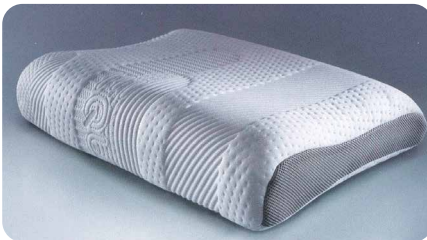
X Your specific physique

Your shoulder width and neck length, together with the hardness of the mattress, will determine the thickness of your pillow.

If possible, try out a pillow before buying it.

Types of pillows

Pillows are classified on the basis of their filling. Different types of pillows are available, e.g. down, feather, foam rubber, memory foam pillows and those filled with buckwheat, spelt or another type of material.



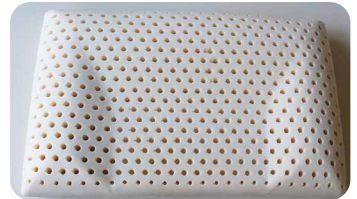
A pillow may be preformed with an additional neck roll to provide support in the hollow of the neck. These are usually made of latex and you should take into account that they take some getting used to.

- Down and feather pillows

Are easy to shape. Their content can adapt to the underlying system and your sleeping position. This provides good support for the neck if the pillow is plumped up properly. However, they soon flatten again reducing the amount of support they provide.

- Foam rubber (latex) pillows

Provide good support and have excellent heat insulation properties. They are available in various shapes and levels of hardness and thickness.



- Memory foam pillows

Contrary to memory foam mattresses, memory foam pillows provide better support. However, the disadvantages associated with this material also have a negative impact. These pillows are also available in various shapes, levels of hardness and thickness.

- Pillows filled with spelt, buckwheat, etc.

These natural materials can provide good support and are usually moisture absorbent. They tend to be equipped with a zip to enable you to adapt the filler to increase or reduce the thickness.

MATTRESS AND BED BASE COMBINATION

The extent and manner of support for the body is not just determined by the mattress alone, but also by the bed base. It is the combination

of the two that determines the level of comfort when lying down. The thicker the mattress and the more it is tailored to your personal physical characteristics, the less important the base will become. With a thinner mattress a base with comfort zones will become more important.

Support for the body is determined by: mattress hardness + mattress thickness + bed base flexibility + pillow

The following table illustrates possible mattress/base combinations with a quality assessment in each case. This assessment may help you decide when buying a system. However, other aspects such as a personal preference for specific materials, mattress hardness or perception of warmth may play an equally important role. Also refer to the following questions before making your choice:

Do you perspire a lot?	Yes?	A feather mattress would be better than a foam rubber one.
Do you prefer to sleep on a hard or soft surface?		Will be determined by your weight and preferences.
Do you have a well de-fined waist?	Yes?	It is best to choose a mattress and/or base with comfort zones.
Are you allergic to house dust mites?	Yes?	You should buy a mattress and pillow made of anti-allergy materials. Anti house dust mite pillow and mattress covers are also available.
Do you have problems with your general health?	Yes?	Check where you need more or less pressure and whether an adjustable bed would be beneficial.
Should your head or feet be positioned slightly higher than the rest of your body for some reason?	Yes?	Opt for an adjustable bed.
Do you suffer from the cold?	Yes?	Choose a mattress with good heat regulation and insulation properties. Avoid silk or cotton ticking.

Potential base and mattress combinations

Combinations:	Our assessment
Fixed slatted base/plank:	
+ polyurethane mattress/cold foam mattress	Too hard/not good
+ foam rubber mattress (latex)	Not good
+ Talalay Perfolatex	Not good
+ memory foam	Not good
+ sprung mattress	Moderate
+ pocket spring mattress with comfort zones	Good to very good
+ modular mattress	Very good
Flexible and tilting slatted base (with comfort zones):	
+ polyurethane mattress/cold foam mattress	Not good to moderate
+ foam rubber mattress (latex maximum 17 cm thick)	Good to very good
+ Talalay Perfolatex (maximum 17 cm thick)	Good to very good
+ memory foam	Moderate
+ sprung mattress	Not advisable
+ pocket spring mattress	Not advisable
+ modular mattress	Very good
Crossways mesh base:	
+ polyurethane mattress/cold foam mattress	Not good
+ foam rubber mattress (latex)	Not good
+ sprung mattress	Moderate to good
+ combi sprung mattress	Moderate to good
+ pocket spring mattress with comfort zones	Good to very good
+ modular mattress	Very good

Combinations:	Our assessment
Box spring:	
+ sprung mattress	Moderate
+ combi sprung mattress	Moderate to good
+ pocket spring mattress with comfort zones	Good to very good
Water bed	Moderate
Flex (plate) base / fixed base with winged elements:	
+ polyurethane mattress/cold foam mattress	Not good
+ foam rubber mattress (latex)	Good
+ Talalay Perfolatex	Good
+ memory foam	Moderate
+ sprung mattress	Not advisable
+ pocket spring mattress	Not advisable
+ modular mattress	Very good

CONCLUSION

The correct bed system will ensure that you have a good night's sleep and feel refreshed in the morning. Bearing in mind that you spend more than six hours a day in bed, investing in a good support system is definitely worthwhile.

The following three elements will contribute to a comfortable and supportive bed system:

- 1. Mattress base.** The mattress base or bed base will fine tune the support provided by the mattress. A slatted, flex plate or winged base should preferably have a reinforced pelvic zone and a softer shoulder zone.
- 2. Mattress.** Thickness, hardness, heat insulation and moisture permeation all play a part when it comes to the comfort provided by a mattress. Always remember to turn over your mattress every three months if possible.

Scientists are increasingly coming to the conclusion that support for the body should primarily be provided by the mattress, and to a lesser extent by the base. This means that the mattress should be of sufficient thickness and provide good support. A modular mattress is the best example of this.

3. **Pillow.** A pillow is meant to support the vertebrae in the neck. Shoulder width, mattress hardness, the length of your neck and your sleeping position will determine the thickness, hardness and shape of your pillow.

A good mattress will provide adequate support for about ten years. You should then consider replacing it.

Pillows are best replaced every three years.

We hope you will sleep like a baby and be totally refreshed when you wake up!

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