New type of material absorbs shearing forces: Lunatec motion 10, Lunatec motion 20 and Lunatec combi motion

We are constantly on the move: walking, running, jumping, standing, which means a lot of pressure and straining on our feet and joints. Every step subjects them to **compressive**, **impact**, **and shearing forces** that must be reduced, above all for patients with **painful foot or joint diseases**, e.g. **rheumatism**.

For this purpose, the new EVA material **Lunatec motion** has been developed. It is available in two versions: **Lunatec motion 10** (extremely soft) and **Lunatec motion 20** (soft), as well as in the composite sheet **Lunatec combi motion**. The composite sheet consists of the bedding layer **Lunatec motion 10** (6 mm) and a stabilising layer of **Lunasoft SL** (10 mm) in light blue.

With a hardness of about 10 Shore A, Lunatec motion 10 is extremely soft, making it ideal especially as a bedding for people with foot pain and as an absorption of shearing forces caused by walking. To provide a better treatment for patients with a weight of over 100 kg, there is now a firmer version available, the Lunatec motion 20. With approx. 20 Shore A and a density of 0,18 g/cm³, it absorbs shear forces with every footstep and ensures ease of the musculoskeletal system.

What must be highlighted here as well are its **excellent bedding and damping properties in the horizontal load plane**. Specifically the composite sheet **Lunatec combi motion** achieves this effect due to vulcanisation of the two layers of differing hardnesses and allows a smooth transition without disruptive adhesive films.

Experience has shown that patients are particularly pleased about the **comfortable and soft wearing comfort** of this material, that also facilitates treatment that was inconceivable with hygienic closed cellular EVA material before.

nora® Lunatec motion 10

bedding cushioning properties

Colours: 06 silk, 56 stone grey approx. 10 Shore A approx. 0,13 g/cm³ approx. 870 x 655 mm

approx. 1.310 x 870 mm

Thickn.: ca. 2 | 3 | 4 | 6 | 8 mm



nora® Lunatec motion 20

bedding cushioning properties

Colour: 17 grey beige
Hardness: approx. 20 Shore A
approx. 0,18 g/cm³
Formats: approx. 830 x 615 mm

Thickn.: approx. 2 | 3 | 4 | 6 | 8 mm





The material **Lunatec motion** can also be used for general orthopaedics, prosthetics and orthotics, e.g. as cushioning in classical orthopaedic devices or as a functional lining on support orthoses and corsets. Besides its excellent **damping** and **pressure spread**, it also has a **good absorption of shearing forces**, making it ideal for pressure sensitive areas exposed to forces from body movements.

nora® Lunatec combi motion

The vulcanised combination of:

Format: approx. 1,200 x 960 mm

Thickness: approx. 16 mm

nora® Lunatec motion

bedding cushioning properties

Colour: 06 silk

Hardn.: approx. 10 Shore A **Density:** approx. 0.13 g/cm³ **Thickn.:** approx. 6 mm

nora® Lunasoft SL

stabilising properties

Colour: 27 light blue
Hardn.: approx. 40 Shore A
Density: approx. 0.20 g/cm³
Thickn.: approx. 10 mm

The objective of treatment with **Lunatec combi motion** may be, for instance, to minimise the shearing forces between the footbed and the sole, and in this manner alleviate the pain. Moreover **Lunatec combi motion** may help patients to start integrating their heels or forefoot actively into their walk again, if these areas have caused pain before and therefore changed their walking pattern. The soft feel enables the patient to consciously place their feet, despite previous periods of pain.

The **soft bedding effect** can be felt to the maximum possible extent when it is worn without an additional top layer. A feeling of firmer standing can be obtained when a top layer of leather or EVA is put on - without compromise to the minimisation of shearing forces by the **Lunatec motion 10** layer. Higher weight classes can also be treated well with additional stabilisation in the rear foot, e.g. of **Lunasoft AL**.

Handling information:

Oven setting: 130 °C

Heating time: about 10 minutes | Cooling time: about 20 minutes

The cut piece of material is heated in a closed source of heat and then moulded to the last in a straight vacuum former. The **cooling time of about 20 minutes** should be observed if the material is not to lose its shape. Afterwards, polish to shape.









dermatest-