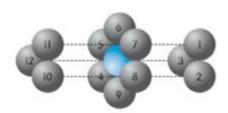
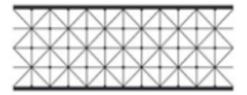
## **The Principle of Microbeads**

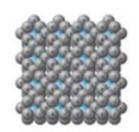
At a maximum volume, every bead has 12 contact points with neighbouring beads. These 12 contact points pass on the energy multi-dimensionally to the next 12 beads. The weakened energy is the again passed on via another 12 contact points.



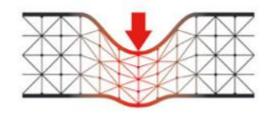
Traditional foam materials have a linear construction of relatively low density. In case of impact the material is compressed to certain threshold value.





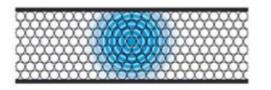


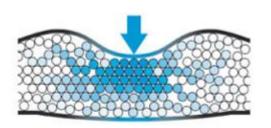
The Microbead structure is multiplied in three-dimensional space. Hundreds of microbead have thousands of contact points, which pass on the weakened energy.



Once the value is exceeded the compressed foam material faces a massive amount of pressure which is transferred onto the structure of the mattress

With the Microbeads, forces are passed via contact points to neighbouring microbeads. In addition, part of the energy is transformed into the thermal energy by the associated friction.





The impact energy is reduced and distributed throughout a large area via millions of contact points. Contrary to traditional foam materials the system requires only a little space

