## YES, CARPETS AND RUGS ARE A SPLENDID OPTION IN ALL KINDS OF DIFFERENT APPLICATIONS

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A carpet is definitely more than just a floor covering with many decorative possibilities. It is also a unique product family, characterised by a typical pile structure, that is not be found in other floor coverings. And it is exactly this pile structure that gives a carpet its very exceptional and interesting properties that are unique in its kind. These remarkable properties explain why carpets are used in so many application fields, where other floor coverings are not or barely present.

It is even possible to increase the many functionalities and microscopic structure of the unique pile structure by applying specific fibres, yarns of finishes, and to expand as such the number of application fields even further.

Before zooming in on specific 4 functionalities of carpets and the different application fields of these functionalities, I would like to draw your attention to the unique composition and structure of carpets. In

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contrast to all other floor covering materials, the top layer of a carpet is far from being compact, but that It is characterized by a specifically open, compressible yet resilient/springy yarn structure. Thanks to this open and compressible structure, the carpet contains much locked-in air. Exactly because of its composition and specific pile structure with air inclusion, a carpet is a highly lightweight material, an acoustically and thermally insulating material, as well as a flexible and resilient material. Moreover, the yarn structure of the top layer has a very large specific surface on which harmful fine dust particles and allergens can adhere. However, thanks to its ability to deform and the accessibility of the top structure, it is possible to remove the absorbed

particles in an effective and efficient manner by means of a functional vacuum cleaner.

Different applications fields of (a) light weight carpets, (b) acoustic and (c) thermal insulation carpets and/or (d) high absorption behavior for fine dust and other particles will be discussed in detail and demonstrated with examples.

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