



Static loading and dynamic loading DLW resilient floor coverings

Dynamic loading:

Load-bearing capacities, e.g. from fork lift trucks, are calculated following the Hertz' formula. For this calculation we need the following data:

- total weight (incl. max. pay load),
- number of wheels,
- size of these wheels (diameter and width),
- material of the tyres (Shore hardness).

There is no general load limit. Yet we know by experience that DLW Linodur and our homogeneous PVC floor coverings withstand a pressure up to 300 N/cm² (appr. 30 kg/cm²). This assumes, however, that the construction of the subfloor is also able to take this pressure, that it is properly prepared for gluing, and that the adhesive is applied over the complete area when installing the flooring.

In the following table is a general overview of the maximum load limits on our resilient floor coverings. Being that there is such a variety of material being used in wheel construction and so many sizes of wheels we are unable to give a binding approval of our floor products.

Floor covering	engine driven vehicles	hand driven vehicles
Linoleum 4,0 mm	300 N / cm ²	300 N / cm ²
Linoleum 3,2 mm	250 N / cm ²	250 N / cm ²
Linoleum 2,5 mm	250 N / cm ²	250 N / cm ²
Linoleum on Korkment Linoleum Acoustic Linoleum AcousticPlus	150 N / cm ²	150 N / cm ²
Vinyl homogeneous	300 N / cm ² *	300 N / cm ²
Vinyl heterogeneous	200 N / cm ² *	200 N / cm ²
Vinyl Acoustic and Vinyl homogeneous on Kork- ment	150 N / cm ² *	150 N / cm ²
Flex-tiles 3,2 mm	300 N / cm ²	300 N / cm ²
Fibre bonded carpets "highly robust" acc. RAL	200 N / cm ²	300 N / cm ²

* Motor-driven vehicles can cause irreparable burn marks through sudden braking on the surfaces of floorings using PVC as a binder. Therefore only manually driven vehicles should be used on PVC floorings.



FLOORING

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Technical Information

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In order to evaluate the load precisely, the exact surface pressure must be calculated using the Hertz' formula. The Technical Information Support will help you in the calculation of the surface pressure for your building projects. Please contact us under the telephone and fax numbers below.

Static loading:

With standing fixtures such as cabinets, chairs, shelves, or similar furniture one speaks of static surface pressure.

This static pressure can be calculated very simply. The total load of fixtures (in kg) is divided through the whole area of furniture legs = amount x (length in cm x breadth in cm = cm²).

In practice this kind of load should not produce a surface pressure exceeding 250 N/cm² (approx. 25 kg/cm²), in order to avoid damage to the floor coverings.

(10 Newton [N] approx. 1 kg)

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