

The quality of Kaindl Laminate and Real Wood flooring is determined on the basis of more than 20 comprehensive technical tests to investigate their surface and functional efficiency properties. One of these surface tests is the Abrasion Test. However, the assessment of the quality of Kaindl flooring by the end user is currently very much on the basis of abrasion.

In Europe abrasion is measured by means of the “Taber Abraser Test” (a test method developed by Messrs. Taber, USA). However, there are also other test methods such as the “Falling Sand Method” in which abrasion is measured on the basis of used up sand.

The **Taber Abraser Test** is, however, the most widely used and recognised test method. It is based on DIN EN Norm 400-2.6, a norm for the testing of HPL surfaces presently used in the absence of standards for the testing of laminate flooring. This norm describes the test procedure exactly.

### Procedure according to DIN EN Norm 438-2.6:

Rotating discs fitted with sandpaper are pressed against the rotating surface of the test object with a defined pressure. Immediately damage is suffered by the decorative layer the number of revolutions made by the test object up to that point is noted and recorded as the “**Initial Point**” (IP).

The abrasive stress is resumed until 95% of the decorative layer is destroyed. The total number of revolutions made by the test object up until this latter point is taken as the “**Final Point**” (FP). Using the formula

$$\frac{\text{Initial Point (IP)} + \text{Final Point (FP)}}{2} \quad \text{the mean value (AT) is determined}$$

When assessing different products, however, the following points may distort comparisons of the respective abrasion resistances:

1. Although the sandpaper complies with the norm an absolutely comparable abrasive stress cannot be achieved (even with sandpaper from one and the same batch) ⇒ uncertainty!
2. Although both the IP and the FP are defined clearly the determination of the same can nevertheless lead to subjective deviations. This means that an enhancement of the FP (by continuing the destructive process until the extent of the damage is > 95% of the decorative surface) the mean value will be enhanced.
3. When stating the abrasion resistance in advertisements it is important to indicate:
  - the test method by which the value was determined (in some cases testing is carried out in accordance with other methods which are not specified with the result that the end user assumes the values are directly comparable)
  - which value is indicated – IP, AT, or FP? (often the mean value is given without this being made clear).

Under the auspices of the Verband der Europäischen Laminatebodenhersteller e.V. (= the Association of European Laminate Flooring Manufacturers) and abbreviated to EPLF which was founded in 1995 eight of the world’s biggest laminate flooring manufacturers came together to reach agreement on – amongst other things – the criteria upon which laminate flooring should be tested. This new test norm is currently being drawn up and will lead to the establishment of a uniform set of more stringent criteria for the qualitative assessment of laminate flooring. Those manufacturers who can satisfy these criteria will be entitled to use the RAL Quality Seal. This quality seal will be displayed on the outside packing both as a guidance to the end user and as guarantee for high quality.

Kaindl Flooring GmbH is a founder member of EPLF and proves the flooring products with the above mentioned “Taber Abraser Test” and indicate the corresponding abrasion class.