

Carpet classification and identification

In the EU there is a unique classification system to determine the usage (use areas) of textile, resilient and laminate floor coverings (EN ISO 10874).

For textile floor coverings according to EN 1307 (Textile floor coverings, classification) 6 different classes were determined – 3 for domestic areas and 3 for contract areas. Domestic and contract use areas are handled separately.

The following pictograms allow for a quick and comprehensive overview.

Domestic areas



For domestic areas with light or occasional use.
Examples of use areas: bedrooms.



For domestic areas with medium use.
Examples of use areas: living rooms.



For domestic areas with intensive use.
Examples of use areas: living- and dining rooms, entrance hallways and corridors.

Contract areas



For contract areas with light or occasional use. Examples of use areas: hotel rooms, conference and meeting rooms, stores.



For contract areas with medium traffic.
Examples of use areas: cinemas, theatres, stores, restaurants, offices.



For contract areas with intensive traffic.
Examples of use areas: hotel reception halls, entrance areas, department stores, open plan offices, corridors, air terminals, airplanes, trains, busses.



Within each of these use classes carpets may vary in luxury (softness, walking comfort). This are depicted with the following symbols. These symbols for luxury are easy to understand, the highest luxury rating is class 5 with 5 crowns.



LC 1



LC 3



LC 5



LC 2



LC 4

With respect to use and luxury classifications, additional characteristics and specific basic requirements have to be met for special use areas and/or to provide specific properties. Each of these additional features have their own, individual symbol; the most important examples are given below.

Castor chair suitability

When castor chairs are used, the carpet pile, especially in those places where the chairs are used, is under extreme stress. Only carpets fulfilling the higher requirements according to a specific test procedure carry these symbols.



Suitable for occasional use (domestic areas, home offices, etc.)



Suitable for intensive use (contract areas, offices etc.)

Stair suitability

When carpets are used on stairs, those parts of the carpet on the edge of a step are under extreme stress. Based on specific test conditions it can be decided whether a carpet can be used on stairs continuously or only occasionally.



Suitable for occasional use (domestic areas, home offices etc.)



Suitable for intensive use (contract areas, offices etc.)

Electrical and antistatic properties

Often, especially in professional environments, higher requirements are necessary, especially in rooms with electronic devices (computers, etc.). In those cases the symbols indicate for the specialist whether the flooring is "static dissipative" or "conductive".



static dissipative



conductive



This symbol indicates that the carpet has "**antistatic**" properties. This means that after walking on the carpet (body voltage) static electricity is immediately discharged; (body voltage at 25 % humidity has to be $\leq 2,0$ kV).

Suitability for underfloor heating



When there is an underfloor heating system underneath a carpet, the carpet has to have minimum insulating properties. Thermal resistance has to be lower than $0.17 \text{ m}^2\text{K/W}$. The symbol indicates that the carpet can be used in combination with underfloor heating systems.

Fraying resistance



The symbol with the scissor indicates, especially for loop pile carpets, that the cutting edges and seams do not fray.

Acoustic properties



If the sound absorption coefficient according to EN ISO 354 has been determined, this symbol is used and the appropriate value must be mentioned in technical documents.



If the impact noise improvement according to EN ISO 140-6 has been determined, this symbol can be used. The relevant value has to be stated in technical documents. All textile floorcoverings show an excellent impact noise improvement.

Light fastness



This icon indicates that the carpet meets the basic requirements for light-fastness (≥ 5 for synthetic fibers, respectively ≥ 4 for natural fibers) in accordance with test method EN ISO 105-B02.

Tiles



Tiles have to fulfil additional requirements, for example for shrinkage/extension and curling (see EN 1307 Annex A). If these criteria are met the producer may use this symbol to indicate that the product is dimensionally stable and can be used as tile, where of course the laying have to be taken into consideration.

Reaction to fire

Reaction to fire is strictly regulated in each EU member state; today, new EU fire classes ranging from class F to class A (in which class A is not relevant for carpets) replace the former national classifications. For floor coverings the addition “fi” is used, to make clear that the products have to be tested and classified for the use as floor covering.

Fire classes D, C and B are subdivided in the classes s1 and s2 for smoke density; smoke density in case of s1 is lower than in case of s2, meaning the product has an overall better performance within the same fire class.

Which fire class has to be met, depends on specific national regulations, but it can be assumed, that at least C_{fi}-s1 is required for most public areas. In general, E_{fi} is sufficient for private application. Fire classes C_{fi} and B_{fi} are generally used only in contract areas.

If the producer cannot give any information about the fire behaviour of his product, he has to label the product with the F_{fi} pictogram.

