

When talking about materials for interior decoration, a general distinction must be made between

- **building products** (building materials and components; this includes e.g. **floor, wall and ceiling coverings**), and
- **other furnishing materials** such as **table and bed linen, curtains and drapes, upholstery fabrics or loose carpets** ("fitted carpets"), which are not building products.

Building regulations or technical building regulations relating to the building regulations of the building regulations (i.e. the OIB guidelines) only contain specifications on the fire behaviour of building products. Since 1 July 2013, the basis for this has been the valid **Construction Products Ordinance** and the **requirements according to the OIB-RL 2, Table 1a**.

(Note: in Lower Austria and Upper Austria the OIB guidelines 2011 are still in force, in all other federal provinces the OIB guidelines 2015 apply).

The Construction Products Regulation requires manufacturers of construction products to draw up a declaration of performance for each product for which a harmonised standard (hEN) has been published in the Official Journal of the EU - and for which the coexistence period referred to in this notice has expired.

The same applies to construction products for which a European Technical Assessment has been issued.



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Construction products for which a declaration of performance has been drawn up must be CE marked. This has also changed slightly.

Construction products that were already CE marked before 1 July 2013 must also show the new declaration of performance and CE marking if they are placed on the market after 1 July 2013. However, the previous test certificates, certificates and European technical approvals can be used as a basis for this.

Construction products that were already placed on the market (i.e. supplied by the manufacturer for distribution or use against payment or free of charge) before 1 July 2013 can continue to be made available on the market by distributors with the "old" CE marking in accordance with the Construction Products Directive.

ÖNORM EN 13501-1, which applies to the classification of the fire behaviour of building products, replaced the former ÖNORM B 3800 Part 1.

With the adoption of this European standard, in addition to new test methods, new designations were introduced instead of the previously used classifications, such as B1/Q1/Tr1 (hardly combustible/low smoke/non-dripping):

Thus, **fire behaviour is now indicated with letters from A (equivalent to non-combustible) to F (equivalent to easily combustible), smoke formation with s1 (low smoke development), s2 or s3 (strong smoke development) and drip formation with d0 (non-drip), d1 (drip) or d2 (ignition-drip).**



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The equivalent of the original B1/Q1/Tr1 classification is C-s1-d0 according to EN 135011.

Note: Classifications for **floor coverings** are indicated by the subscript **"f1"**, e.g., C_{f1}-s1 (= successor to B1/Q1; drop formation not relevant for floor coverings).

These new designations thus replace the indications of reaction to fire contained in the withdrawn ÖNORM B 3800 Part 1 (flammability: e.g. "hardly flammable - B1", smoke formation: e.g. "weakly smoking - Q1" and drop formation: e.g. "not dripping - Tr1").

The respective requirements for the fire behaviour of building products are specified **in Table 1 a of OIB Guideline No. 2 "Fire Protection"** depending on the respective building class.

For building products, in addition to the requirements for fire behaviour, requirements for fire resistance are also regulated by building law.

For furnishing materials, such as curtains, furniture fabrics or decorative materials, **other standards apply, such as EN 13773, ÖNORM B 3825, ÖNORM B 3822 or ÖNORM A 3800-1.**

There, the "old" designations (Q1/2/3 or Tr1/2/3) can still be found in some cases; **the designation "B1" no longer appears in this standard, only the term "hardly combustible"**, which repeatedly causes confusion in practice.



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The respective requirements for these interior furnishing materials are defined apart from building specifications:

E.g. **in social regulations for care facilities, event laws or fire regulations.**

For example, special requirements for textiles can be specified for use in care facilities or for decorations at events.

Precise requirements are generally specified in the notice of use for the respective object or event.

These regulations and specifications can naturally vary from "object to object", but also from "federal state to federal state".

There is therefore no general set of regulations that is generally valid for interior furnishing materials.

This does not apply to building products - here the regulations are clearly defined in OIB RL-2 and EN 13501-1.

Table 1 - see page 5 - provides an overview of the classification (testing) standards currently valid in Austria for demonstrating the fire, smoke and dripping behaviour of the individual interior materials.



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Table 1: Applicable classification/testing standards for interior furnishing materials

	Fire behaviour	Smoke behaviour	Drip behaviour
Building products ¹⁾	EN 13501-1	EN 13501-1	EN 13501-1 ²⁾
Curtains and curtain-like products	EN 13773	ÖNORM A 3800-1	EN 13772
Upholstery fabrics	ÖNORM B 3825	ÖNORM A 3800-1	not applicable
Decoration materials	ÖNORM B 3822	ÖNORM A 3800-1	ÖNORM B 3822
Other materials	ÖNORM A 3800-1 ³⁾	ÖNORM A 3800-1	ÖNORM A 3800-1 ³⁾

1) This also includes all floor, wall and ceiling coverings. 2) Not applicable to floor coverings. products and product types for which there are specific standards for testing reaction to fire.

3) Excluding construction

There is no CE marking for upholstery fabrics, curtains and other furnishing fabrics.

Unfortunately, it has only been possible to achieve a European standard in some cases (e.g. EN 13773 and EN 13772 for curtains), but not in others (e.g. upholstery fabrics).

Although there is a European test standard (EN 1021 Parts 1 and 2), there is no classification standard, **so that in Austria the national ÖNORMEN B 3825 and A 3800-1 are still used for testing and assessing fire and smoke behaviour (see Table 1).**



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A striking example of this is the German standard DIN 4102-1, whose classification "hardly combustible" is the counterpart to "B1" in Austria.

However, in Germany, the assessment of "hardly combustible" does not take care into whether the material drips or not.

In Austria, on the other hand, the dripping behaviour of certain materials (e.g. decorative materials, especially if they are arranged "overhead") is also included in the assessment.

A material that meets the conditions of ÖNORM B 3822 for decorative materials must also be "non-drip" and "low-smoke".

For example, plastic-sheathed parts of a stage decoration may be "low flammability" but show "ignition dripping"; this is not accepted in Austria.

In the past, the period of validity was four years (ÖNORM B 3800 Part 2) and could be extended twice by two years each time after expiry (after eight years, a complete new test had to be carried out).

With the new EN standards, there is no longer a period of validity, but as long as the material is not changed, it can be used on the market.

So only if something is changed in the material or "new" testing and/or classification regulations are implemented, a new test is necessary.



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For tenders, it is therefore recommended to demand proof by means of a test certificate that is not too old (e.g. not older than five years).

In practice, the approach of "impregnating" (easily) combustible equipment materials with flame retardants to make them flame retardant is frequently used.

If these are professional suppliers or outfitters who process such materials in large quantities and have tested the respective material accordingly, there is no reason why they should not be used. Flame retardants used in this way are certainly effective.

A big risk, on the other hand, are the various agents that are available on the market for the "do-it-yourself" sector, because here the source of error is correspondingly large.

Furthermore, it is hardly possible to make a general statement about the effect of flame retardants, as a test then always refers only to the one tested material and in practice not all material combinations can be tested.

CONCLUSION:

Our tissue paper with the certificate ÖNORM B 3822 and the A 3800 Part 1 is best suited for the highest fire protection requirements regarding flame retardant AND dripping/smouldering properties.



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