

Fire reaction of upholstered furniture for the Italian market: the “spot” test

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Specific legal provisions which prescribe for the class 1.IM a certification by an authorized laboratory have been in force for many years for the upholstered furniture products and also the homologation issued by the Italian Home Office is required for serial productions.

Furniture manufacturers and related suppliers know that very well.

In this article we would like to summarize some key points on the relevance of evaluating the correct choice of materials composing the upholstered parts of a furniture product and that must be tested (from the different types of coverings and interliner, to the different upholstery available on our market.), given that a good fire behavior of these components is crucial, although not always sufficient, to obtain class 1.IM.

This kind of assessment is critical for the following reasons:

- for a positive result of the test, it is important that also the assembly of the materials pass it, not just the individual components;
- the provisions of the Italian Home Office require the authorized laboratories to request a payment in advance for this type of certification (ref. Articles 8 and 10 of the Ministerial Decree 06/26/1984 amended by Ministerial Decree 03-09-2001);
- the cost of these certifications can also be very significant, so it is advisable to minimize the risk of a negative result in subsequent tests.



A necessary clarification must be made: to believe or to assume that two materials that obtained an excellent classification in terms of fire reaction when individually tested, maintained it even when matched tested, is risky for the following reasons:

- it happens that manufacturers compare different test methods with each other;
- the potential different use of the material determines the different fire reaction of the same (a fabric used as drapery / curtain or as a sofa cover can satisfy the test for the first use but may not satisfy or even behave in a very bad way for the second use);
- the best fire reaction class obtained from the single material is not always an indication of its good behavior; it could have obtained this class by satisfying the required requirement to the very limit;
- unavoidably, unpredictable chemical reactions with poor repeatability are triggered during the test.

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All this leads us to be very cautious in predicting and giving certainty of a positive outcome even after having carried out the spot test on a small sample consisting of materials not previously conditioned.

The purpose of the spot test is to guide the customer, with a low cost, towards the possible correct choice. It is not possible to guarantee for certain that the spot test will meet the reference standard UNI 9175, but the indication that will be drawn will certainly be useful in providing us with ideas and possible corrections to be implemented.

The spot test is not only suitable for upholstered furniture but also for curtains, wooden plywood and plastics for non-upholstered seats, innovative materials that require a set up of their reaction to fire performance, etc.

Catas Fire Department provides assistance in order to help customers identify the fastest, most effective and cheapest way to reach this goal.

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