

Future proofing the Euroclass system



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Safety in case of fire is not only an essential requirement in the European Construction Products Regulation (CPR), but also one of the cornerstones of local building regulations across Europe. Getting occupants out of a building safely in case of a fire is the ultimate goal. To achieve this goal, it is important that the fire classification of a construction product is linked to a risk and is not just a random ranking.

This is why the European fire regulators back in the mid-nineties decided that construction products should be evaluated based on their tendency to cause flashover if exposed to a fire in the corner of a small room. The basic philosophy is that the classification obtained in the SBI test shall be linked to how the product will perform in the ISO 9705 Room Corner test. The philosophy of the Harmonised European testing and classification system for construction product's reaction to fire performance (Euroclasses) is shown in the figure below.

The essential Guidance Paper G

The principle behind the system was described in detail in a paper from the European Commission called Guidance Paper G. This paper also showed what to do with families of construction products where either the SBI test was not appropriate to use or where the Room Corner test was not the correct reference scenario test. Guidance Paper G was used to develop the Euroclasses to also handle products such as cables and pipe insulation.

When the Euroclass system was developed in the nineties, the classification criteria for the SBI test was based on the performance of 26 different construction products in the ISO 9705 Room Corner test. According to Björn Sundström¹, the classification system developed would predict the risk correctly for almost 90% of the construction products on the market at that time. This was a good performance for the system, but will it continue to stay that way?

From CPD to CPR: We need to bring back Guidance Paper G

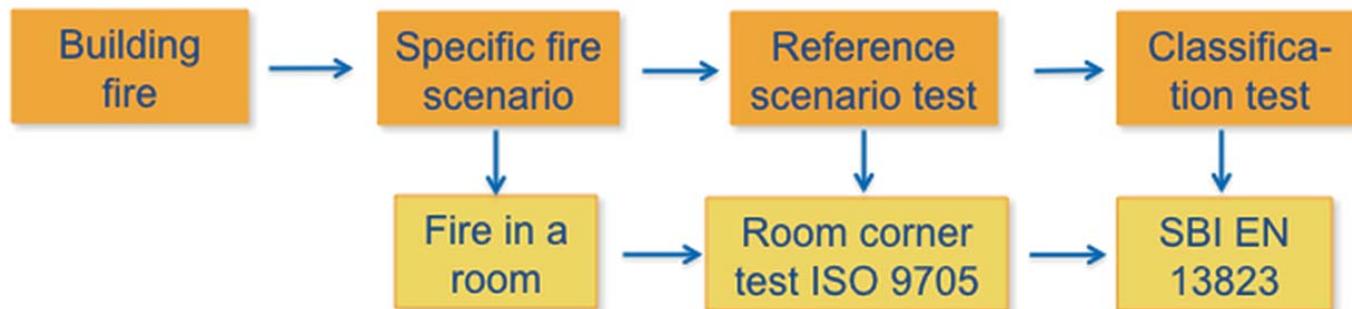
When the Construction Products Regulation (CPR) replaced the Construction Products Directive (CPD) in 2013, all supporting documents to the CPD, such as Guidance Paper G, lost their validity. Consequently the principles behind the Euroclass system are at risk of being forgotten and the possibility to further develop the system to be able to handle modern construction products could be lost.



PHOTO: FIRE SAFE EUROPE

Catherine Stihler Member of the European Parliament to the right and Birgitte Messerschmidt, Fire Safe Europe to the left.

With new trends such as energy efficiency, sustainability and green buildings driving the development of new construction products, it is imperative that these new types of products obtain a classification that is linked to an actual risk. This can only be secured if we keep



The philosophy of the Harmonised European testing and classification system for construction product's reaction to fire performance (Euroclasses).



Sian Hughes, Fire Safe Europe, David McCarrey, Scottish Fire and Rescue and Björn Sundström, SP Technical Research institute of Sweden.

looking back at the basic philosophy of the Euroclasses, and re-evaluate if the link to the performance in the large-scale test is still valid. Otherwise, new construction products will be tested only to the defined small-scale tests, and the link to their performance in a relevant reference scenario will never be considered. In time, this will lead the European fire tests and classification system becoming a simple comparison of products with an output that does not provide any meaningful link to risk. When that is the case, it will not be possible for EU Member States to provide safety in case of building fires!

Fire Safe Europe’s call to action to improve fire safety in buildings

This is why Fire Safe Europe together with MEP Catherine Stihler hosted an event at the European Parliament on November 17th 2015 titled: “Better regulation for fire safety: Does the Construction Products Regulation deliver?”. The event had participants from The European Parliament, European Commission, CEN, EOTA, Group of Notified Bodies, Fire Scientists as well as a broad range of industries. The event included four presentations: Björn Sundström reminded us that keeping the link between the fire classification system and the actual fire behaviour of construction materials is key. David McCarrey from the Scottish Fire and Rescue Service explained why it is important that correct products are installed in buildings and that they are installed correctly. Gwenole Cozigou provided the input from the European Commission and informed that the Commission Services plan to have a study on smoke toxicity in 2016. Finally James Robinson and myself, Birgitte Messerschmidt, presented the view of Fire Safe Europe, an organisation of which we are both active members. The presentations were followed by a very lively discussion, concluding with a general agreement that keeping the link to risk is key to the continued success of the Euroclass system.



Participants at the event “Better regulation for fire safety: Does the Construction Product Regulation deliver).

What steps can the EU take to ensure the fire safety of buildings?

Having fire test methods that reflect the actual fire behaviour of construction products is key to have safety in case of fire. This is why Fire Safe Europe calls on the European Commission to urgently:

- Incorporate the principles of Guidance Paper G in the CPR
- Mandate the standards to include both smoke opacity and toxicity by introducing smoke hazard class
- Incorporate a fitness check of standards to ensure they are applicable to all construction products on the market