



ETICS AND FIRE SAFETY

Long way to European harmonization considering national requirements

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Safety

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The "Facade project"

- Invitation to tender from EC a year ago
- Develop a European approach to:
 - assess the fire performance of facades
 - define all relevant details
 - classify facades
- The BS 8414 series and DIN 4102-20 should be used as a basis for testing
- "Falling off" shall be included
- Meet the regulatory provisions

- Project group with members from RISE (Sweden), BRE (UK), BAM (Germany), EMI (Hungary) and Efectis (France)
- Large group of sub-contractors

The "Facade project"

- The project started in January 2017
- The draft final report shall be ready tomorrow!!!
- The future will tell whether we have been successful or not.

The work process

- Sub-contractors in all Member States
 - Collect information on the regulations and assessment procedures
 - Contact with the national regulators
 - Double-check and give eventual corrections
- A draft assessment procedure was presented to Advisory Group Fire and stakeholders
- Comments on the draft assessment procedure was collected from AGF/stakeholders/sub-contractors
- The assessment procedure has been remade, where all comments have been adressed

Definitions and national regulations

- The definition of "facade" is very different, and varies from the complete external wall, to the outer skin of a building
- In addition to the BS 8414 and DIN 4102-20 there are currently 9 other methods in use
- All MS have regulations on facades using EN 13501-1 & 2
- 15 MS have additional requirements



Main comments on the draft proposal

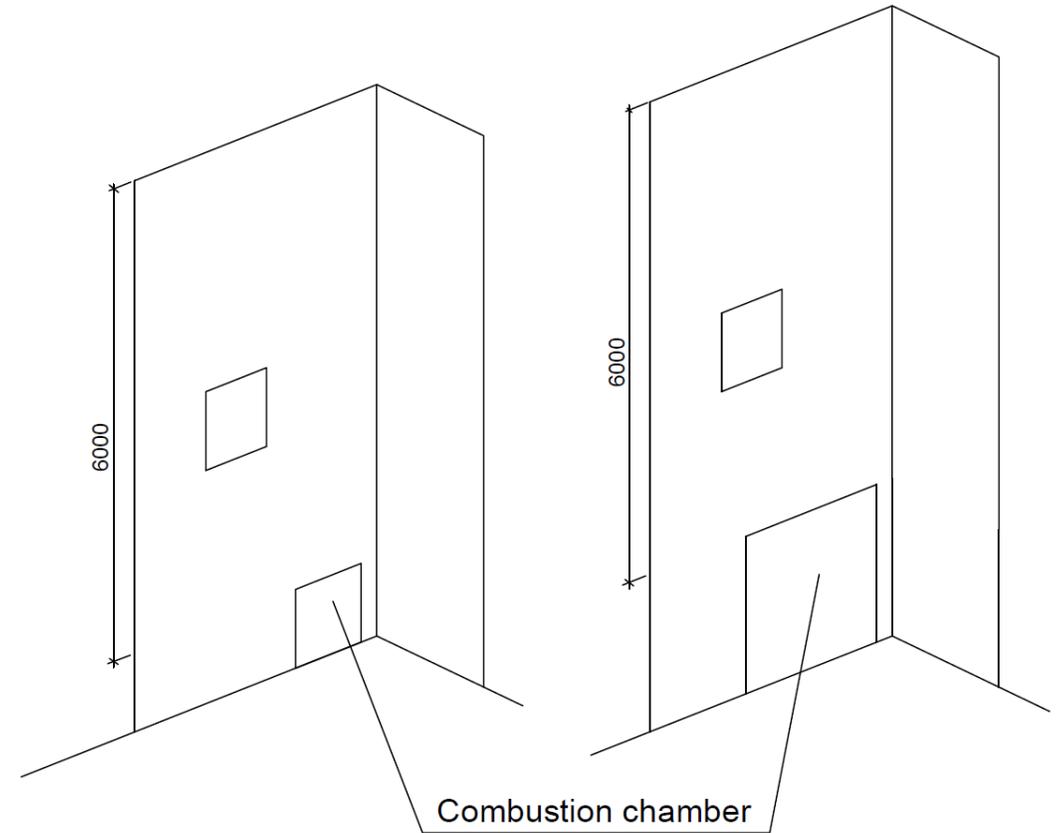
- Develop a new modern test method
 - Outside the scope of the present project
- Smoke is important
 - There are no regulations on smoke with respect to facades
- Smouldering shall be considered - Smouldering shall not be considered
 - There is a European method for smouldering, EN 16733
- Use of historical data
 - For CE-marking it is probably not possible. Until CE-marking is mandatory, it is a national question.
- Detailing such as mounting around openings
 - Most are in favour of having this kind of detailing
- Classification
 - Aim for a simple classification system, with as few classes as possible

Handling of the regulatory provisions

Regulation characteristics	Slovak republic	Hungary	Switzerland	Sweden	Austria	Germany DIN	Germany -technical regulation	Finland	Poland	England & Wales, Scotland, Ireland	France	Denmark-Norway	Proposed criteria
Flame spread – vertical	x	x	x	x	x	x	x	x	x	x	x	x	Yes
Flame spread horizontal		x	x		x	x	x			x	x		Yes
Flame spread – internal	x		x	x	x	x	x	x	x	x	x	x	Yes
Connection between floor and facade		x		x						x	x		Fire resistance
Smouldering						x					x		EN 16733
Falling parts		x	x	x	x	x		x	x	x		x	Yes
Smoke				x*		x							Only observations
Heat (through temperature or flux)		x		x	x							x	Yes
Detailing (window openings, fire stop, etc)		x		x							x	x	Definition of scope

Assessment method

- The shape and size of the different methods are quite similar.
- Two different heat exposures are proposed
 - medium fire exposure
 - large fire exposure
- Detailing around openings is introduced
- Classification in four different classes, two for the large fire exposure and two for the medium fire exposure



Coming challenges

- Get acceptance for a new assessment method in the MS
 - Changes for all MS
- Is the proposed test method good enough?
 - Very little data on repeatability and reproducibility of facade test methods
 - The method have to be validated for novel and innovative facade systems (solar panels, green facades...)
 - Environmental conditions - in many countries are the tests performed outdoors
- Field of application
 - Both direct and extended field of application will be needed
 - Due to the wide scope it will be a challenging work



THANK YOU!

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