



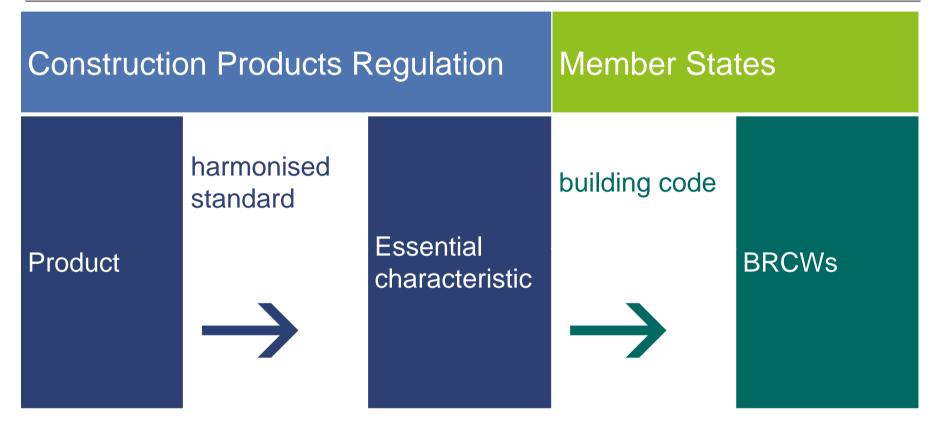
# Basic Requirements Construction Works

Construction works as a whole and in their separate parts must be fit for their intended use, taking into account in particular the health and safety of persons involved throughout the life cycle of the works. Subject to normal maintenance, construction works must satisfy these basic requirements for construction works for an economically reasonable working life.

- 1. Mechanical resistance and stability
- 2. Safety in case of fire
- 3. Hygiene, health and the environment
- 4. Safety and accessibility in use
- 5. Protection against noise
- 6. Energy economy and heat retention
- 7. Sustainable use of natural resources

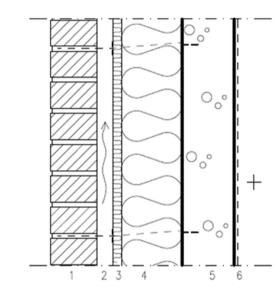


### **BRCW** meaning

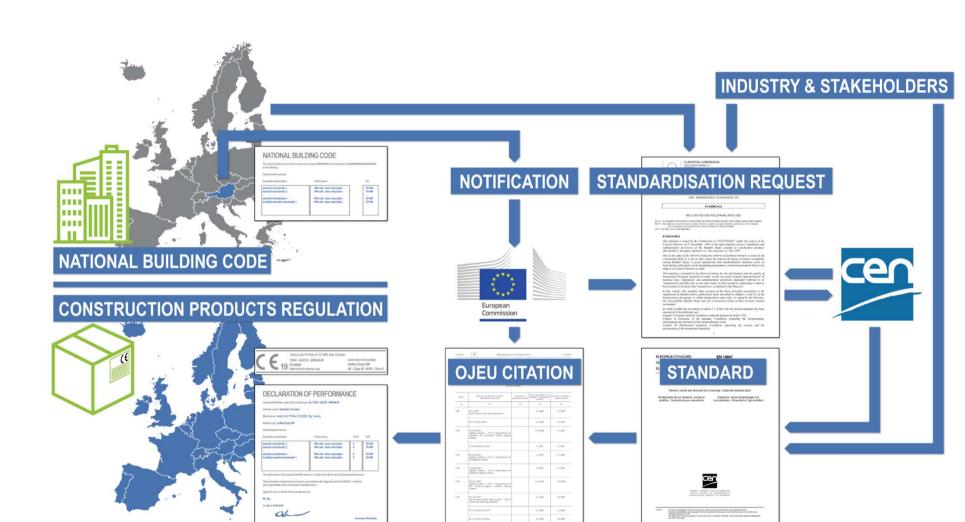




# Wall structure made on CE-marked products satisfying BRCWs in Finland



dimension		product	hEN/essential characteristic	requirement level
	1	Masonry brick, CE-marked	EN 771-1 ja SFS 7001 Compressive strength Water suction Freeze-thaw resistance	f <sub>b</sub> ≥ 5 N/mm <sup>2</sup> To be expressed SFS 7001 Annex 1 test passed
		Masonry mortar, CE-marked	EN 998-2 ja SFS 7001 Compresive strength Freeze-thaw resistance	f <sub>b</sub> ≥ 5 N/mm <sup>2</sup> SFS 7001 Annex 2 test passed
		Stainless steel – brick ties, CE-marked	EN 845-1 ja SFS 7001	According to structural design
40 mm	2	Air ventilation cap		
30 mm	3	Hard mineral wool as wind shield, CE-marked	EN 13162 Thermal conductivity Reaction to fire Water suction Water vapor permeability Air flow resistivity level Dimensional stability	$\begin{array}{l} \lambda_D \geq 0,033 \text{ W/mK} \\ \text{Equal or better B-s1,d0 }^\#) \\ \text{WS } (\geq 1 \text{ kg/m}^2) \\ \text{To be expressed } \mu \\ \text{To be expressed AFr-rating} \\ \text{DS}(23,90) \end{array}$
175 mm	4	Mineral wool, CE-marked	EN 13162 Thermal conductivity Reaction to fire Water suction Water vapor permeability Air flow resistivity level Dimensional stability	$\lambda_D \geq 0,033 \text{ W/mK}$ Equal or better B-s1,d0 #) WS ( $\geq$ 1 kg/m <sup>2</sup> ) To be expressed $\mu$ To be expressed AFr-rating DS(23,90)
150/160 mm	5	Precast concrete wall unit, CE-marked	EN 14992 ja SFS 7026	According to structural design
	6	Surface finishing according to architectur	al design	
	#) 1	requirement level is to the surface in contact with air gap, when the height of the P1 class building is ≤ 56 m		





### Court case T-229/17

### Harmonised European system cannot be complemented by Member States' provisions

CPR Article 8(4) A Member State shall not prohibit or impede, within its territory or under its responsibility, the making available on the market or the use construction products bearing the CE marking, when the declared performances correspond to the requirements for such use in that Member State.

However, a Member State has the responsibility to fulfil those BRCWs taken into the national legislation, even the DoP in accordance with the hEN does not fit the needs

For the above case the Commission has not given any practical advise how a MS could reach to an acceptable short term solution not in conflict with the CPR



### Revision of Annex I

### Annex I contains BRCWs in a general description

CPR Article 2(4) 'essential characteristics' means those characteristics of the construction product which relate to the basic requirements for construction works

Note 1: One essential characteristic may in special cases be related to more than one BRCW

Note 2: Often essential characteristics have to be divided into several proxy characteristics

Annex I is the legal framework for the development of essential characteristics but problems will arrive if it is taken too literally



## How to deal with requirements from MS not covered by Basic Requirements of Construction Works?

They can become a barrier to trade

They may be very relevant in the performance of the construction works

e.g. dimensional tolerances are not essential characteristics for a lot of products

Note: Legal framework how to add new requirements into the national legislation and thus new essential characteristics into standardization requests need to be developed



### Who decides if a requirement is linked to a BRCWs?

Technical knowledge is required to decide if the requirement is covered or not

e.g. coatings colour may modify the thermal performance of a metal façade Member States do not refer to BRCW when they notify their national regulations

To whom is the link to a BRCW relevant?

Note: Committee on Standards is the official body to take the decision on new essential characteristic after discussion in the SCC but SCC does not always have enough product specific expertise



### Are characteristics not regulated in any Member State needed?

Discussion about voluntary characteristics asked by the clients of the products is a continuous source of problems in standardisation

Voluntary characteristics included in harmonised standards are requested to be included in the Annex ZA (but how?) or removed from the standard

The link with regulatory needs is sometimes unclear

Why cannot CEN TCs propose voluntary characteristics to be included into the Annex ZA?



### Do we really need BRCW as the basis of hENs?

European legislation can cover any Member State and European requirement related to the performance of construction works

- e.g. water tightness of a product to deal with national requirements
- e.g. environmental performance to deal with EU Green Deal goals

The consolidated list of essential characteristics in the relevant standardisation request is the legal reference "de facto" for the preparation of hENs



### Pending issues

BRCWs should be the legal basis for the development of national building codes

Declaration of performance expressing essential characteristics and thus creating interface between products and works should not only be based on BRCWs