

## TECHNICAL NOTE

### Windows, Doors and Curtain walls have no structural function

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Given the development of an increasing number of harmonised product standards with requirements for CE marking, it is becoming more important to have a shared understanding of the products that are either “structural” or “non-structural”.

CEN Mandates constitute the basis for the European Commission to cite harmonised product standards in the EU Official Journal. For windows and doors, harmonised product standards are developed in line with the CEN Mandate M101; for curtain walling, the harmonised product standard is developed in line with the CEN Mandate M108. Each of these Mandates states clearly:

- the products in scope of the standard, including relevant components such as glass infills;
- all essential characteristics regulated by the Member State(s) and to which of the Basic Requirement for Construction Works (BRCW) each of the essential characteristics relates to.

BRCW 1 concerns “Mechanical resistance and stability”, in other words characteristics relating to any structural function. For both CEN Mandates M101 and M108, no essential characteristics belong to BRCW 1, as by definition these products “*fulfil their own integrity and mechanical stability but do not contribute to the load bearing stability of the main building structure*” (see CEN Mandate M108).

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→ Therefore, products that are in scope of the harmonised product standards based on CEN Mandates M101 and M108 are not structural and, as a consequence, their components also do not have any structural function (e.g. glass infills).

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It is also important to distinguish between products that should be assessed for their *mechanical resistance and stability* (i.e. structural products referencing BRCW 1) and those that should be assessed for their *safety in use* (i.e. non-structural products referencing BRCW 4), which is the case for fenestration products in the scope of the relevant harmonised product standards.

**Applied example:** For curtain walling in scope of EN 13830, the Eurocodes EN 1990 and EN 1991 are used to determine the applied loads (e.g. dead load, wind load) that are transferred from the curtain walling to the main building structure, only to assess its safety in use according to BRCW 4.

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