



European Commission
DG Enterprise and Industry
Unit B-1 (Sustainable industrial Policy and
Construction)
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Problems concerning EN 14509 Self-supporting double skin metal faced insulating panels — Factory made products — Specifications”

The Finnish Ministry of the Environment has as a part of preparation for the execution of CPR studied the harmonized product standard EN 14509 “Self-supporting double skin metal faced insulating panels — Factory made products — Specifications”.

We have made the following observations:

EN 14509 is a harmonised product standard for self-supporting applications, but the standard is covering also rules for structural applications. The product standard is based on mandates M 121 *Internal and external wall and ceiling finishes* and M 122 *Roof coverings, roof lights, roof windows and ancillary products*. These mandates are for products for roof coverings and wall and ceiling finishes which may be loaded by lightweight loads but not heavy duty loads. These existing mandates are not suitable for load bearing applications loaded by heavy duty loads since structural characteristics are not fully and properly covered.

In Annex 3 of mandate M 122 the Attestation of Conformity systems do not cover load bearing applications. Attestation of Conformity systems for sandwich panels in Tables 1/6, 2/6 and 3/6 are covering resistance to fire, reaction to fire and external fire performance, in Table 4/6 “for uses contributing to stiffening the roof structure” having system 3 and in Table 6/6 “for other uses” having system 4.

In Annex 1 and 2 of the mandate M 121 wall and ceiling panels include sandwich panels. Attestation of conformity systems for sandwich panels in different intended uses are thus covered in Tables 1/5...5/5 having system 3 or 4. For example internal or external stiffening sandwich panels in walls or ceilings have system 3.

The correct Attestation of Conformity system for structural applications loaded by heavy duty loads is system 2+.

In Nordic Countries where we have significant loads on roofs and wall structures and where the span used in sandwich panel constructions are of significant length the harmonised product standard EN 14509 is not applicable. The main problem is that the mandates for the standard are only covering applications which cannot be loaded by heavy duty loads. This is also shown in the scope of the standard which is intended for self-supporting purposes.

There seems to be a conflict between the mandates 121 and 122 and the product standard itself as EN 14509 is giving rules for heavy duty load bearing applications which is not covered by the mandates. In EN 14509 the Attestation of Conformity system is system 3 for fire performance and system 4 for other properties including also mechanical resistance.

There is a need of a separate harmonised product standard for metal faced sandwich panels loaded by heavy duty loads or an Amendment have to be prepared to EN 14509.

Corrective actions:

Therefore we ask for an Amendment to the Mandate 120 'STRUCTURAL METALLIC PRODUCTS and ancillaries' to insert metal faced sandwich panels loaded by heavy duty loads and having Attestation of Conformity system 2+. This would enable the elaboration of a harmonised product standard for these products. The standard shall also cover fixing of the sandwich panel to substructure as this is an essential part of the structural behavior.

Our proposal for the Amendment of the mandate M 120 is enclosed.

We ask the Commission to put the Amendment of mandate M 120 on the agenda of the next SCC meeting.

With best regards,

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Head of the Finnish Delegation to SCC