



National applications of harmonized European standards

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Mandates

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MANDATE TO CEN/CENELEC
 CONCERNING THE EXECUTION OF STANDARDISATION WORK
 FOR HARMONIZED STANDARDS ON

**INTERNAL AND EXTERNAL WALL AND
 CEILING FINISHES**

RELATED TO THE FOLLOWING END USES

04/33 EXTERNAL WALLS (INCLUDING CLADDING), INTERNAL WALLS AND PARTITIONS
 10/33 SUSPENDED CEILINGS
 11/33 EXTERNAL FINISHES OF WALLS
 12/33 INTERNAL FINISHES OF WALLS AND PARTITIONS
 14/33 CEILING FINISHES

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In order to fulfill the provisions of article 7.1 of the CPD the present mandate has been structured in the following way:

Foreword

Chapter I : Grounds. General conditions within the framework of the CPD.

Chapter II : Execution of the mandate. Conditions regarding the programming, development and execution of the standardisation work.

Chapter III : Harmonised standards. Conditions regarding the content and the presentation of the harmonised standards.

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FOREWORD

<http://europa.eu.int/comm/dg03/directs/dg3d/d3/construc/en/techspee/cen/c.../m121.ht> 1999-02-02

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MANDATE TO CEN/CENELEC
 CONCERNING THE EXECUTION OF STANDARDISATION WORK
 FOR HARMONIZED STANDARDS ON

**ROOF COVERINGS, ROOFLIGHTS, ROOF
 WINDOWS AND ANCILLARY PRODUCTS**

RELATED TO THE FOLLOWING END USES :

7/33 : Roofs
 9/33 : External and internal doors and windows, roof openings and rooflights
 15/33 : Roof finishes

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Annex 1

List of products to be included in the mandate

(Metal products)

- Sandwich Panels
- Trapezoidal Profiles
- Sinusoidal Profiles
- Liner Trays, Cassettes
- Metal tiles



Annex 2

Essential Requirements - Performance Characteristics

1. Racking strength/mechanical aspects

2. External fire performance

Reaction to fire

Fire resistance

3. Emission of radioactivity

Release of asbestos

Release of formaldehyde

Release of dangerous substances

Susceptibility to the growth of harmful micro-organisms

Water vapour permeability

Water permeability

Water vapour permeability

For the purposes of this document, the water vapour transmission coefficient for the metal facings used is considered to be infinity. Metal faced sandwich panels are therefore considered to be impermeable to water vapour.



Annex 2

Essential Requirements - Performance Characteristics

4. Shatter properties – safe breakability
Flexural tensile strength
Resistance to fixings
5. Direct airborne sound insulation
Sound absorption
6. Thermal resistance



Annex 3 Attestation of Conformity

Tasks		Systems					
		1+	1	2+	2	3	4
Manufacturer	Initial Type Testing of the product						
	Testing of samples according prescribed test plan						
	Factory Production Control						
Notified Body	Initial Type Testing of the product						
	Audit-testing of samples taken at the factory, on the market or on the construction site						
	Certification of factory production control on basis of initial inspection						
	Continuous surveillance, assessment and approval of production control						
		Manufacturers Conformity Declaration					
	Certification						



Product	Intended use	Levels or classes	Attestation of conformity systems
Factory made sandwich panels	External walls and roofs and internal walls and ceilings subject to reaction to fire regulations	A1*, A2*, B* and C*	1
		A1**, A2**, B**, C**, D and E	3
		F	4
	External walls and roofs and internal walls and ceilings subject to resistance to fire regulations	See EN 13501-2	3
	External roofs subject to regulations on external fire performance, other than CWFT	See prEN 13501-5	3
	All end uses subject to regulations on release of regulated substances	-	3
Internal or external uses subject to:	- external fire performance CWFT	-	4
	- mechanical resistance		
	- sound absorption		
	- airborne sound insulation		
	- thermal performance		
	- air permeability		
	- water permeability		
	- dimensional variation		

* Products/materials for which a clearly identifiable stage in the production process results in an improvement of the reaction to fire classification (e.g. an addition of fire retardants or a limiting of organic material).

** Products/materials not covered by footnote (*).



Products	Intended use(s)	Level(s) or class(es)	Attestation of conformity systems ^b
Self-supporting metal sheets and metal tiles	Internal and external walls, ceilings and roofs subject to reaction to fire regulations	A1 ^a , A2 ^a , B ^a , C ^a , D, E	3
		C ^c , F	4
	External roofs subject to external fire performance regulations	Products requiring testing (see prEN 13501-5)	3
		Products "deemed to satisfy"	4
End uses subject to regulatory requirements on regulated dangerous substances	-	3	
End uses other than those above	-	4	

^a Any product tested for reaction to fire.

^b System 3: See CPD Annex III.2.(ii), second possibility; System 4 : See CPD Annex III.2.(ii), third possibility.

^c CWFT products.



Annex 4

Dangerous substances

"Concerning dangerous substances which are in construction products, classes and/or levels of performance to which technical specifications will refer, shall allow the levels of protection needed by the works to be guaranteed, taking into account the purpose of the works."

In addition, outside the scope of the Directive, writers of technical specifications must take into account legislation which affects materials to be used for construction products and which are regulated for reasons not related to the incorporation of the construction products into the works.



Mandates allow to elaborate
product standards
that fulfil the requirements
mentioned in the mandate

It is not the aim of the mandates to:

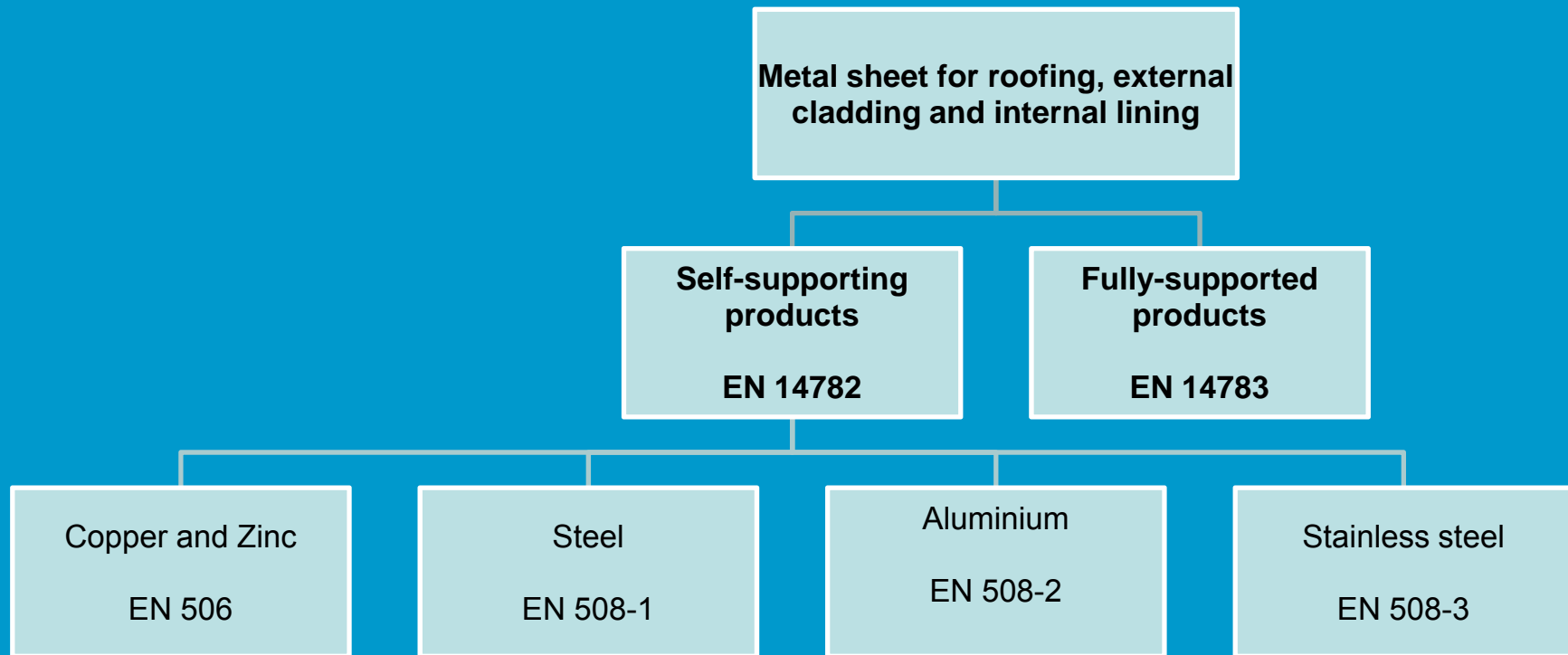
- elaborate application rules
- fix safety levels or levels of performances
- elaborate the performances of the installed product



National rules



Metal sheet for roofing, external cladding and internal lining





EN 14782

Mandatory since 1st November 2007

Products:

- Trapezoidal sheets
- Cassettes
- Liner trays
- Sinusoidal sheets
- Curved profiled sheets
- Metal tiles



EN 14782

- Roofs
- Walls
- Ceilings
- Soffits

Applications clearly not covered by the scope:

Examples:

- Profiled for water-proof systems
- Inner skin of a double skin system for roofs
- Products for structural purpose



EN 14782

Applications not covered by the scope:

- Products for structural purposes

Factory made self-supporting metal sheets (for non-structural applications)

This standard does not cover products for structural purposes, i.e. it does not cover products intended to contribute to the global or partial stability of the building by providing racking resistance or resistance to permanent static loads (excluding self-weight).

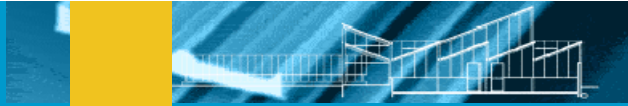


Application of EN 14782



CE-Marking on the basis of EN 14782 to guarantee free trade inside the European Union





The Netherlands: No additional requirements

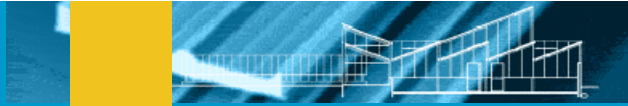
Belgium: No additional requirements

Poland: No additional requirements

but: The owner and the installation company have to
decide on the appropriateness of the product

or:
The manufacturer can ask for an application
approval voluntarily

→ No individual decision on the work-site



Italy:

You have to follow the

- Ministry of Public Works Decree from 9th January 1996
"Technical standards for calculation, execution and testing of normal and prestressed reinforced concrete structures and for metal structures".
- Ministry of Public Works Decree from 16th January 1996
"Technical standards concerning «The general criteria for buildings and loads and overloads safety checks»".
- For non-accessible roofs resistance to
an additional vertical load of 0,50 kN/m²
a concentrated vertical load of 1,20 kN at 50mm x 50mm



Germany: CE-marking is sufficient for:

- Small elements for roofing and wall-cladding with area $\leq 0,4 \text{ m}^2$ and self-weight $\leq 5 \text{ kg}$
- Wall-cladding elements with width $\leq 0,3 \text{ m}$ and span $\leq 0,8 \text{ m}$
- Roofing elements with span $\leq 1,0 \text{ m}$



Germany: For all other elements you need

CE-mark + Ü-mark

Ü-mark based on DIN 18807

in combination with an independent third-party control

DIN 18807:

- Calculation methods
- Testing procedures
- Installation rules



France: For the erection of the building (installation) :

The following document will be made in conformity with the CE marking when it will be revised

- DTU 40.35 for roofs that defined:
 - how to build (technological dispositions)
 - the loading applied on the roof
 - how to do the load table

- Professional rules for cladding of 1981 that defined:
 - how to build (technological dispositions)
 - the loading applied on the roof
 - how to do the load table



EN 14509

Self-supporting double skin metal faced insulating panels
– Factory made products –

Start of coexistence period is not published

Products:

- roofs and roof cladding
- external walls and wall cladding
- walls (including partitions) and ceilings within the building envelope



EN 14509

Insulation Materials:

- rigid polyurethane
- expanded polystyrene
- extruded polystyrene foam
- phenolic foam
- cellular glass
- mineral wool



EN 14509

Products not covered by the scope:

- sandwich panels with a declared thermal conductivity for the insulating core greater than 0,06 W/mK at 10 °C
- products consisting of two or more clearly defined layers of different insulating core materials (multilayered)
- panels with perforated facing(s)
- curved panels

Panels, put on the market as a component of a cold storage room, building and/or building envelope kit, are covered by a ETA-Guideline 21 “Cold storage premises kits”.



Application of EN 14509



The Netherlands: No additional requirements

Belgium: No additional requirements

Voluntary:

ATG 05/2192 Sandwich panels

ATG 04/1701 Iso panels



Spain:

No additional requirements

For housing:

CTE: regulation about insulation fire
performance, structure acoustic

For industrial buildings:

RD 2267: Fire performance



Germany:

EN 14509 + Application Approval

Only CE-mark

Application Approval is only a document with

- Declaration of individual material safety factors
- Application rules (indoor, outdoor, etc.)
- Fastening

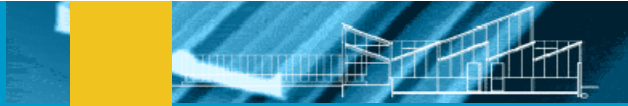


Germany:

There are no rules in the standard for
Sandwich panels with hidden fastenings

→ German Approval

Only Ü-mark



France:

For the product:

- Applicable for panels with two metal facing without perforations
- Definition of a national complement XP P 34 900-2 to define the national coefficients of security, load combination factors and the design by testing approach

For the erection of the building :

The following document shall be made in conformity with the CE marking:

- Technical assessment will become a Technical Document of Application – DTA - example:
AT 2/07-XXX



Content of a typical Technical Document of Application

3 families of Technical Document of Application:

- “industrial cladding”
- “industrial roof”
- “cold storage at controlled temperature (cladding, ceiling, partition)”

For each family, a voluntary Technical Document of Application will contain at minimum:

- For the product => testing and performances following EN 14509
- For the security (Ψ ; γ etc) => national complement
- For the building (note of calculation / load tables)
 - => two possibilities
 - Following annex E EN 14509
 - Following national complement (design by testing)
- For the erection of the building (drawing with all the technological aspects)



Future situation:

Product + Application

European Product Standard

+

National Application Rule / Standard



Enjoy your CE-mark

Thank You