



EUROPEAN COMMISSION
ENTERPRISE DIRECTORATE-GENERAL

Single Market, regulatory environment, Industries under vertical legislation
Conformity and standardisation, new approach, industries under new approach

Brussels, 17 February 2000

M/135 – EN

(CONSTRUCT 97/221 REV. 2)

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

FLAT GLASS, PROFILED GLASS AND GLASS BLOCK PRODUCTS

RELATED TO THE FOLLOWING END USES :

- 4/33 : External walls, internal walls and partitions**
- 5/33 : Floors, galleries and ceilings**
- 6/33 : Prefabricated systems for floors and galleries, stairs, ramps, ...**
- 8/33 : Frames (including chimneys and shafts)**
- 9/33 : External and internal doors, windows, roof openings and rooflights**
- 10/93 : Suspended ceilings**
- 11/93 : External finishes of walls**
- 12/33 : Internal finishes of walls and partitions**
- 14/33 : Ceiling finishes**
- 15/33 : Roof finishes**
- 27/33 : Transport - lifts, hoists, escalators, conveyors**

FOREWORD

This mandate is issued by the Commission to CEN/CENELEC within the context of the Council Directive of 21 December, 1988 on the approximation of laws, regulations and administrative provisions of the Member States relating to construction products (89/106/EEC), hereafter referred to as "the Directive" or "the CPD".

One of the aims of the Directive being the removal of technical barriers to trade in the construction field, in so far as they cannot be removed by means of mutual recognition among Member States, it seems appropriate that standardisation mandates cover, at least during a first phase of the mandating programme, construction products likely to be subject to technical barriers to trade.

This mandate is intended to lay down provisions for the development and the quality of harmonised European standards in order, on the one hand, to make "approximation" of national laws, regulations and administrative provisions (hereafter referred to as "regulations") possible and, on

the other hand, to allow products conforming to them to be presumed to be fit for their intended use, as defined in the Directive.

In this respect, this mandate takes account of the basic principles prevailing in the regulations of Member States, particularly those described in chapters 3 and 4.2 of the Interpretative documents, to which standardisers must refer. As stated by the Directive, the responsibility Member States have for construction works on their territory remains unchanged.

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

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.

CHAPTER I GROUND S

1. This mandate falls within the framework of the general policy of the Commission with respect to technical harmonisation and standardisation, as well as within the scope of the Directive. It replaces any previous mandate on the same products formerly issued on a provisional base by the Commission.
2. This mandate is based on article 7 of the Directive and has taken into consideration the Interpretative Documents¹ that serve as reference for the establishment of the harmonised standards (see article 12 of the Directive). It serves to ensure the quality of the harmonised standards for products, always with reference to the state of the art, with particular reference to the fitness of the products listed in annex 1 intended to be used in **EXTERNAL WALLS, INTERNAL WALLS AND PARTITIONS, FLOORS, GALLERIES AND CEILINGS, PREFABRICATED SYSTEMS FOR FLOORS AND GALLERIES, STAIRS, RAMPS, RAISED ACCESS FLOORS BALUSTRADES AND HAND RAILS, FRAMES (INCLUDING CHIMNEYS AND SHAFTS), EXTERNAL AND INTERNAL DOORS, WINDOWS, ROOF OPENINGS AND ROOFLIGHTS, SUSPENDED CEILINGS, EXTERNAL FINISHES OF WALLS, INTERNAL FINISHES OF WALLS AND PARTITIONS, CEILING FINISHES, ROOF FINISHES, TRANSPORT - LIFTS, HOISTS, ESCALATORS, CONVEYORS**, enabling the works to satisfy the essential requirements set out in annex 1 of the Directive, provided that barriers to trade in these products exist and that the products fall within the scope of article 2.1 of the Directive;
3. Levels or classes of requirements for the works are under the responsibility of Member States and are not covered by the present mandate. As a consequence, they are not expected to be defined in the harmonised standard.

¹ O.J. C 62, 28.02.1994

4. Levels or classes of requirements for the products may be determined either in the Interpretative Documents or according to the procedure provided for in article 20 (2) of the Directive. In either case, where levels or classes of requirements for products are determined, guidance is given in Annex 3 to this mandate. This is not the case for classes of convenience, which are classes of product performances developed as a means of convenience for specifiers, manufacturers and purchasers. Such classes of convenience are not covered by the present mandate and should not be defined within the harmonised standard. Nevertheless, the results of the determination of the product characteristics may be expressed using classes of convenience introduced by European standards. Articles 3.2 and 6.3 of CPD do not apply to such classes.
5. The harmonised standards resulting from this mandate must allow for products to comply with them even where performance does not need to be determined for a certain characteristic because at least one Member State has no legal requirement at all for such characteristic. Declaration of performance for such a characteristic, in this case, must not be imposed on the manufacturer if he does not wish to declare it.
6. Indications regarding the documents which should be taken into account to inform standardisers and manufacturers on national and harmonised legislation on substances classified as dangerous are given in Annex 4.

CHAPTER II EXECUTION OF THE MANDATE

1. CEN/CENELEC will present the Commission with a detailed work programme, at the latest, **three months after approval of 98/34 Committee.**
2. The work programme should identify clearly the list of harmonised standards to be developed. For each harmonised standard it should :
 - indicate the name(s) of the product(s) to be covered;
 - define the characteristics, durability aspects, intended uses and the forms and materials to be covered (in accordance with Annexes 1, 2 and 3 of this mandate);
 - attach the list of supporting documents (e.g. work items on test methods, ...);
 - justify the timetable foreseen for its finalisation; and
 - identify the Technical Committee(s) responsible for the work.
3. Clear differentiation should be made between the item to become the harmonised standard for the product and the items to be used as supporting documents.
4. When a supporting test standard for one characteristic does not exist or is not in the work programme of the TC, a clear statement should be presented indicating whether CEN is able to produce one or not.
5. Any proposals for the addition of products, intended uses and materials and forms not included in the mandate but considered relevant by the TC should be presented separately from the work programme for further analysis by the Commission services. Standards prepared for products outside this mandate will not achieve the status of harmonised standards. In addition to the provisions of article 4.1 of the CPD, it must be taken into account that all the products included in the mandate have a system of attestation of conformity in accordance with the relevant Decision of the Commission; those products not included have not.

6. Any proposal for the addition of characteristics and durability aspects not included in the mandate but considered relevant by the TC should be proposed in a special chapter of the work programme for further analysis by the Commission services.
7. Where a classification system of the product performances is envisaged in Annex 3 of the present mandate, CEN/CENELEC are requested to make an appropriate proposal for its implementation.
8. CEN/TCs must give a technical answer for the determination of the characteristics of the mandate taking into account the conditions stated below; test methods suggested must be directly related to the relevant required characteristic and must not make reference to determination methods for characteristics not required by the mandate. Durability requirements should be dealt with in the framework provided by the state of the art at present.
9. Reference to test/calculation methods must be in accordance with the harmonisation aimed at. In general, only one method should be referred to for the determination of each characteristic, for a given product or family of products.

If, however, for a product or family of products because of justifiable reasons, more than one method is to be referred to for the determination of the same characteristic, the situation must be justified. In this case all referenced methods should be linked by the conjunction "or" and an indication of application should be given.

In any other case, two or more test/calculation methods for the determination of one characteristic can be accepted only if a correlation between them exists or can be developed. The relevant harmonised product standard must then select one of them as the method of reference.

Testing and/or calculation methods shall have, whenever possible, a horizontal character covering the widest possible range of products

10. Within the work programme, CEN/CENELEC will also specify those cases where the performance-based approach will not be followed in the harmonised standard and will give the relevant justification.
11. After examination of the work programme and consultations with CEN/CENELEC, the Commission services will endorse the timetable and the list of standards or parts of standards which meet the terms of this mandate and which will be recognised as harmonised or supporting standards.
12. The terms of reference of this mandate may be subject to modification or addition, if necessary. Acceptance of the work programme by the Commission services does not imply acceptance of all the WIs listed as supporting standards. TCs will need to demonstrate the direct link between WIs and the needs for harmonisation of the products, intended uses and characteristics given in the mandate. Nor does acceptance exclude the possibility for further WIs to be added by CEN, in order to fully respond to the terms of the mandate
13. Representatives of the authorities responsible for national regulations have the right and shall be able to participate in the activities of CEN/CENELEC through their national delegations and to present their points of view at all stages of the drafting process of the harmonised standards.
14. The Commission may participate in standardisation activities as observer and has the right to receive all relevant documents.
15. CEN/CENELEC will immediately inform the Commission of any problem relating to the carrying out of the mandate and will present an annual progress report on work within the framework of the mandate.

16. The progress report will include a description of work carried out and information on any difficulties being met, whether political or technical, with particular reference to those that might lead the authorities of a Member State to raise objections or to resort to article 5.1 of the Directive.
17. The progress report will be accompanied by the latest drafts of each standard under the mandate and by updated reports on any subcontracted work.
18. Acceptance of this mandate by CEN/CENELEC will initiate the standstill procedure referred to in article 7 of Council Directive 83/189/EEC of 28 March 1983 modified by Council Directive 88/182/EEC of 22 March 1988 and the European Parliament and the Council Directive 94/10/EC of 23 March 1994.
19. Acceptance of this mandate by CEN/CENELEC can take place only after the work programme has been endorsed by the Commission services.
20. CEN/CENELEC will develop the draft harmonised European standards and of the relevant supporting standards on the basis of the work programme and will inform the Commission in good time that the draft is being circulated for public comment.
21. CEN/CENELEC will present the final drafts of the harmonised European standards and of the relevant supporting standards to the Commission services for confirmation of compliance with this mandate at the latest in accordance with the timetable agreed between CEN/CENELEC and the Commission and referred to in point II.2.d).
22. CEN/CENELEC members will publish the standards transposing the harmonised European standards at the latest 6 months after a positive vote in CEN/CENELEC. National standards covering the same scope will continue to be applicable until the date agreed between CEN/CENELEC and the Commission in accordance with point II.2.d)

CHAPTER III. HARMONISED STANDARDS

1. Harmonised standards shall be prepared to allow those products listed in Annexes 1 and 2 to be able to demonstrate the satisfaction of the essential requirements. One of the purposes of the Directive being to remove barriers to trade, the standards deriving from it will therefore be expressed, as far as practicable in product performance terms (art. 7.2 of the Directive), having regard to the Interpretative Documents.
2. The harmonised standard will contain :
 - A detailed scope and field of application
 - A detailed description of the product or family of products covered and the relevant intended uses of the different products;
 - The definition of the characteristics of the products listed in Annex 2 of the mandate (expressed in performance terms, as far as practicable) that are relevant to the satisfaction of the essential requirements;
 - The methods (calculation, test methods or others) or a reference to a standard containing the methods for the determination of such characteristics;

- Guidance on the characteristics that have to be stated within the labelling that will accompany the CE marking (depending on the intended use of the product) and on the way of expressing the determined values of these characteristics;
 - The classification system and the levels for the above values of characteristics, if required by the mandate;
 - The system for attestation of conformity as required in annex 3 of the mandate and the corresponding specific provisions for the evaluation of conformity.
3. A minimum or a maximum level of a given characteristic that has to be met by the family of products or a product may be identified by the harmonised standard only if required by agreement of Member States expressed by positive vote under the procedure of article 20 .
 4. As far as possible, each standard will make reference to performances common to other standards developed under mandate and which constitutes a cohesive and compatible group of harmonised European standards developed in parallel. CEN/CENELEC shall ensure consistency within the whole package.
 5. A producer not wishing to meet a non-mandated European standard will be able to use the CE marking on his product by referring only to the relevant harmonised standard. On the other hand, if a non-mandated standard includes the entire content of the harmonised standard, compliance with the former standard will also give a presumption of conformity to the harmonised standard and will enable the bearing of the CE marking.

In the latter case, an appropriate system should be established in the European standard in order to clearly distinguish the CPD-related content from the remaining part of the standard.

6. Harmonised standards must permit construction products which allow works to meet the essential requirements and which are produced and used lawfully in accordance with technical traditions warranted by local climatological and other conditions to continue to be placed on the market.
7. The essential requirements being expressed in terms of performance of the works, the characteristics of the products should be also expressed in terms of performance so that, in referring to the harmonised European standards, the regulations may "approximate" evolving in terms of "performance requirements". As far as practicable and depending on the intended use mentioned in the annexes of this mandate, the standard shall include a definition of the durability in term of performance of the declared values of the product characteristics as well as suitable methods for its evaluation against the actions listed in Annex 2. If the durability is expressed in terms of classes of periods, articles 3.2 and 6.3 of the CPD will not apply.
8. The relevant systems for attestation of conformity, according to Article 13.3 and Annex III of the Directive, are listed in annex 3. For the establishment of the corresponding specific provisions of evaluations of conformity, the harmonised standard will take into account :
 - the different intended uses of the product mentioned in the annexes of this mandate and, if any, the different levels or classes of performance;
 - cases of individual (non series) production according to Article 13.5 of the Directive;
 - the recommendations of paragraph 3 of Annex 3

9. The label accompanying the CE marking will list all the characteristics to be declared according to the declared intended uses mentioned in the annexes of this mandate. In order to take into account existing regulations on products where performance for one or more characteristics may not be required, the label should allow the manufacturer the application of the "No performance determined" case for that or those characteristics.

ANNEX 1

FIELD OF APPLICATION

FLAT GLASS, PROFILED GLASS AND GLASS BLOCK PRODUCTS**TO BE USED IN:**

- 1/33 : Floor beds, ... *
- 4/33 : External walls, internal walls and partitions
- 5/33 : Floors, galleries and ceilings
- 6/33 : Prefabricated systems for floors and galleries, stairs, ramps, ...
- 8/33 : Frames (including chimneys and shafts)
- 9/33 : External and internal doors, windows, roof openings and rooflights
- 10/93 : Suspended ceilings
- 11/93 : External finishes of walls
- 12/33 : Internal finishes of walls and partitions
- 13/33 : Floor and stair finishes *
- 14/33 : Ceiling finishes
- 15/33 : Roof finishes
- 18/33 : Drainage and disposal of other liquids and gaseous waste *
- 27/33 : Transport - lifts, hoists, escalators, conveyors
- 30/33 : Circulation fixtures *
- 32/33 : Sanitary and cleaning fixtures *

| FORM | MATERIALS | PRODUCTS FOR CONSIDERATION |
|--|---|--|
| Rigid sheets (small, medium and large size); | Glass (can incorporate : organic materials, metal, silicate materials, silicone materials) | Flat glass panels (incl. glass for structural sealant glazing systems) : Basic glass (e.g. soda-lime-silicate glass, borosilicate glass, glass ceramics); Processed glass (e.g. strengthened glass, laminated glass); Special or safety glasses (e.g. toughened safety glass, laminated safety glass, anti-bullet glass, anti-explosion glass, anti-bandit and anti-vandalism glass, glass for use in fire resisting glazed assemblies, glass incorporating electric heating and/or alarm systems); Coated, filmed, enamelled, surface treated or mirrored glass. |
| Large units | Glass (can incorporate : metal) | Glass block wall panels |
| Profiles | Glass (as rigid sheets) | Curved glass panels (incl. glass for structural sealant glazing systems; types as for flat glass panels); Channel-shaped glass (wired or unwired). |
| Components | Glass (as rigid sheets) | Insulating glass units (plane or curved; incl. glass for structural sealant glazing systems; glass types as for flat glass panels; can incorporate electric heating of the glass and/or alarm systems); Ancillary products for glass block wall panels † |
| Blocks | Glass (can incorporate : metal) | Glass blocks Glass pavers * |
| Rigid tiles | Glass | Tiles * |
| Pipes | Glass | Pipes * |

* included in other mandates and not considered here ; † no characteristics relevant to essential requirements

ANNEX 2
TECHNICAL TERMS OF REFERENCE

Note : *not all of the characteristics shown in the following tables will be relevant for every product in a particular family or sub-family. CEN/CENELEC should select the subset of characteristics applicable to a particular product from the full set provided.*

FLAT GLASS, PROFILED GLASS AND GLASS BLOCK PRODUCTS

TO BE USED IN:

- 4/33 : External walls, internal walls and partitions
- 5/33 : Floors, galleries and ceilings
- 6/33 : Prefabricated systems for floors and galleries, stairs, ramps, ...
- 8/33 : Frames (including chimneys and shafts)
- 9/33 : External and internal doors, windows, roof openings and rooflights
- 10/93 : Suspended ceilings
- 11/93 : External finishes of walls
- 12/33 : Internal finishes of walls and partitions
- 14/33 : Ceiling finishes
- 15/33 : Roof finishes
- 27/33 : Transport - lifts, hoists, escalators, conveyors

FAMILY AND SUBFAMILIES

A - FLAT AND CURVED GLASS PANELS

Monolithic or laminated, transparent, translucent, clear, tinted or opaque glass supplied in rectangular flat panes in stock sizes for final use in buildings, or manufactured or shaped to size, as follows :

1. BASIC GLASS, e.g. :

Basic soda-lime-silicate glass (float glass, polished wired glass, drawn sheet glass, patterned glass, wired patterned glass); the magnitude of the proportions by mass of the principal constituents of this glass are: SiO₂ (69% to 74%), CaO (5% to 12%), Na₂O (12% to 16%), MgO (0% to 6%), Al₂O₃ (0% to 3%).

Basic borosilicate glass (float glass, drawn sheet glass, rolled glass, cast glass); the magnitude of the proportions by mass of the principal constituents of this glass are: SiO₂ (70% to 87%), B₂O₃ (7% to 15%), Na₂O, K₂O, Al₂O₃ (1% to 8%), others (0% to 8%).

Glass ceramics (rolled glass, cast glass); the magnitude of the proportions by mass of the principal constituents of this glass are: SiO₂ (50% to 80%), Al₂O₃ (15% to 27%), Li₂O (0% to 5%), ZnO (1% to 5%), TiO₂, ZrO₂ (0% to 5%), MgO, CaO, BaO (0% to 8%), Na₂O, K₂O (0% to 2%)

2. PROCESSED GLASS, (with its own typical shatter properties) e.g. :

Heat strengthened glass, chemically strengthened glass, and laminated glass, made from, e.g., soda-lime-silicate glass, borosilicate glass, or glass ceramics

3. SPECIAL OR SAFETY GLASS e.g. :

- Thermally toughened safety glass, heat soaked thermally toughened safety glass, laminated safety glass
- Special glasses made from laminated safety glass, e.g. anti-bullet glass, anti-explosion glass, anti-bandit and anti-vandalism glass
- Special glasses for use in fire resisting glazed assemblies, or incorporating electric heating and/or alarm systems

4. COATED, FILMED, ENAMELLED, SURFACE TREATED OR MIRRORED GLASS

Characteristics to be covered by the harmonised standard will be :

| E R | PERFORMANCE CHARACTERISTICS ² | DURABILITY |
|-----|--|---|
| 1 | | Y (e.g. against chemicals, weathering, UV, temperature, ... as relevant) |
| 2 | Resistance to fire (for glass for use in a glazed assembly intended specifically for fire resistance) Reaction to fire External fire performance (for roof coverings only) | |
| 3 | | |
| 4 | Shatter properties (safe breakability) / Impact behaviour Resistance to impact / attack Mechanical resistance (e.g. resistance to wind, snow, permanent and thermal loads, bending strength, pressure strength, delamination resistance ... as relevant) | |
| 5 | Direct airborne sound insulation | |
| 6 | Thermal properties Radiation properties | |

FAMILY AND SUBFAMILIES

B - CHANNEL-SHAPED GLASS

5. CHANNEL-SHAPED GLASS

Translucent or opaque, clear or tinted, wired or unwired soda-lime-silicate glass obtained by continuous casting and rolling, which is formed into a U shape during the manufacturing process. Supplied in stock sizes for final use in buildings.

Characteristics to be covered by the harmonised standard will be:

| E R | PERFORMANCE CHARACTERISTICS | DURABILITY |
|-----|--|---|
| 1 | | Y (e.g. against chemicals, weathering, UV, temperature, ... as relevant) |
| 2 | Resistance to fire (for glass for use in a glazed assembly intended specifically for fire resistance) Reaction to fire External fire performance (for roof coverings only) | |
| 3 | | |
| 4 | Shatter properties (safe breakability) / Impact behaviour Resistance to impact / attack Mechanical resistance (e.g. resistance to wind, snow, permanent and thermal loads, bending strength, pressure strength, ... as relevant) | |
| 5 | Direct airborne sound insulation | |

² Electrical safety aspects fall within the scope of the Low Voltage Directive (for glasses incorporating electric heating and/or alarm systems).

| | |
|---|--|
| 6 | Thermal properties Radiation properties |
|---|--|

FAMILY AND SUBFAMILIES

C - INSULATING GLASS UNITS

6. INSULATING GLASS UNITS

Units consisting of at least two panes of glass separated by one or more spacers along the periphery, assembled in the factory using various edge sealing processes. These panes are separated by one or more hermetically sealed spaces enclosing dehydrated air and/or other gases. The glass panes may consist of any glass panel as described under “Family A”, and may be rectangular, or in the form of other shapes with straight and/or curved edges. The units may be plane or curved.

Characteristics to be covered by the harmonised standard will be:

| E R | PERFORMANCE CHARACTERISTICS ³ | DURABILITY |
|-----|--|--|
| 1 | | Y |
| 2 | Resistance to fire (for units for use in a glazed assembly intended specifically for fire resistance) Reaction to fire External fire performance (for roof coverings only) | (e.g. against chemicals, weathering, UV, temperature, gas loss, ... as relevant) |
| 3 | | |
| 4 | Shatter properties (safe breakability) / Impact behaviour Resistance to impact / attack Mechanical resistance (e.g. resistance to wind, snow, permanent and thermal loads, bending strength, pressure strength, edge seal strength... as relevant) | |
| 5 | Direct airborne sound insulation | |
| 6 | Thermal properties Radiation properties | |

³ Electrical safety aspects fall within the scope of the Low Voltage Directive (for units incorporating electric heating and/or alarm systems).

FAMILY AND SUBFAMILIES

D - GLASS BLOCKS**7. GLASS BLOCKS**

Square, rectangular or round air tight, hollow or monolithic glass bodies made from soda-lime-silicate glass. Used for the construction of non-load bearing glass block walls (a building element with glass blocks separated with mortar joints, and used as a closing element, inside or outside, a filling element in walls and facades, or a separative element).

Characteristics to be covered by the harmonised standard will be:

| E R | PERFORMANCE CHARACTERISTICS | DURABILITY |
|-----|--|---|
| 1 | | Y (e.g. against chemicals, weathering, UV, temperature, ... as relevant) |
| 2 | Reaction to fire | |
| 3 | | |
| 4 | Mechanical resistance (e.g. compression strength, resistance to fixings, ... as relevant) Resistance to impact / attack | |
| 5 | Direct airborne sound insulation | |
| 6 | Thermal properties Radiation properties | |

FAMILY AND SUBFAMILIES

E - GLASS BLOCK WALL PANELS**8. GLASS BLOCK WALL PANELS**

Non-load bearing, prefabricated panels of glass blocks (glass blocks separated with mortar joints, for use as a closing element, inside or outside, a filling element in walls and facades, or a separative element).

Characteristics to be covered by the harmonised standard will be:

| E R | PERFORMANCE CHARACTERISTICS | DURABILITY |
|-----|---|---|
| 1 | | Y (e.g. against chemicals, weathering, UV, temperature, ... as relevant) |
| 2 | Resistance to fire (for fire compartmentation uses) Reaction to fire | |
| 3 | | |
| 4 | Shatter properties (safe breakability) / Impact behaviour Resistance to impact / attack Mechanical resistance (e.g. resistance to wind and permanent loads, resistance to fixings, ... as relevant) | |
| 5 | Direct airborne sound insulation | |
| 6 | Thermal properties Radiation properties | |

COMPREHENSIVE TABLE OF CHARACTERISTICS

FLAT GLASS, PROFILED GLASS AND GLASS BLOCK PRODUCTS

| E.R. | PERFORMANCE CHARACTERISTICS | Family / Sub-family | | | | | | | | Dur |
|------|---|---------------------|---|---|---|---|---|---|---|-----|
| | | A | | | | B | C | D | E | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |
| 1 | | | | | | | | | | Y |
| 2 | Resistance to fire | Y | Y | Y | Y | Y | Y | | Y | |
| | Reaction to fire | Y | Y | Y | Y | Y | Y | Y | Y | |
| | External fire performance (for roof coverings) | Y | Y | Y | Y | Y | Y | | | |
| 3 | | | | | | | | | | |
| 4 | Shatter properties (safe breakability) / Impact behaviour | Y | Y | Y | Y | Y | Y | | Y | |
| | Resistance to impact / attack | Y | Y | Y | Y | Y | Y | Y | Y | |
| | Mechanical resistance | Y | Y | Y | Y | Y | Y | Y | Y | |
| 5 | Direct airborne sound insulation | Y | Y | Y | Y | Y | Y | Y | Y | |
| 6 | Thermal properties | Y | Y | Y | Y | Y | Y | Y | Y | |
| | Radiation properties | Y | Y | Y | Y | Y | Y | Y | Y | |

ATTESTATION OF CONFORMITY

Note : for products having more than one of the intended uses specified in the following families, the tasks for the approved body, derived from the relevant systems of attestation of conformity, are cumulative.

| |
|---|
| Product family : flat glass, profiled glass and glass block products (1/6) |
|---|

1. Levels and classes for product performances

- 1.1 According to article 3.2 of the CPD and Clause 1.2.1 of the IDs, a classification of product performance has been identified as the means of expressing the range of requirement levels of the works in respect of **reaction to fire** and of **resistance to fire**.

Regarding reaction to fire, CEN/CENELEC are requested to follow the Commission Decision 94/611/EC [O.J. L 241 of September 1994] and make reference to the standard(s) to be prepared under Commission mandate to CEN/CENELEC "Horizontal complement to the mandates in respect of reaction to fire" in dealing with reaction to fire in the specific harmonised product standards to be developed under this mandate.

Regarding resistance to fire, CEN/CENELEC are requested to make reference to the standard(s) to be prepared under Commission mandate to CEN/CENELEC "Horizontal complement to the mandates in respect of resistance to fire" in dealing with resistance to fire in the specific harmonised product standards to be developed under this mandate.

- 1.2 Reaction to fire and resistance to fire are risks for which the need for classification systems has been identified for the time being.

Further needs may be identified on the basis of differences specified in Article 3 (2) of the CPD, which are justified in conformity with Community law (IDs Clause 1.2.1).

Where for such needs it is recognised that a classification of product performance is the means of expressing the range of requirement levels of the works, the Commission will give the appropriate guidance or will request CEN/CENELEC to make the appropriate proposal through a modification to this mandate.

2. Systems of attestation of conformity

For the product(s) and intended use(s) listed below, CEN/CENELEC are requested to specify the following system(s) of attestation of conformity in the relevant harmonised standard(s) :

| Product(s) | Intended use(s) | Level(s) or class(es) <i>(fire resistance)</i> | Attestation of conformity system(s) |
|--|---|---|-------------------------------------|
| Flat or curved glass panels Channel-shaped glass Insulating glass units | for use in a glazed assembly intended specifically to provide fire resistance | any | 1 |
| Glass block wall panels | for fire compartmentation | any | 1 |
| System 1: See CPD Annex III.2.(i), without audit-testing of samples | | | |

3. Conditions to be applied by CEN on the specifications of the attestation of conformity system

- 3.1 The specification for the system should be such that it can be implemented even where performance does not need to be determined for a certain characteristic, because at least one Member State has no legal requirement at all for such characteristic [*see the "no performance determined" case under Article 2.1 of the CPD and when article 3.2 classes apply, clause 1.2.3 of the Interpretative Documents*]. In those cases the verification of such a characteristic must not be imposed on the manufacturer if he does not wish to declare the performance of the product in that respect.
- 3.2 Regarding products falling under systems 1 for the initial type testing of the product [see Annex III.1.a) of the CPD] the task for the approved body will be limited to the following characteristics, where relevant :

Resistance to fire

- 3.3 For products falling under system 1, regarding the continuous surveillance, assessment and approval of the factory production control [see Annex III.1.g) of the CPD], parameters related to the following characteristics shall be of the interest of the approved body, where relevant :

Resistance to fire

| |
|---|
| Product family : flat glass, profiled glass and glass block products (2/6) |
|---|

1. Levels and classes for product performances1.1 *[text as for family (1/6)]*1.2 *[text as for family (1/6)]***2. Systems of attestation of conformity**

For the product(s) and intended use(s) listed below, CEN/CENELEC are requested to specify the following system(s) of attestation of conformity in the relevant harmonised standard(s) :

| Product(s) | Intended use(s) | Level(s) or class(es) <i>reaction to fire</i> | Attestation of conformity system(s) |
|--|--|---|--|
| Flat or curved glass panels | for uses subject to reaction to fire regulations | A, B, C | 3 |
| Channel-shaped glass | | ----- | ----- |
| Insulating glass units | | A*, D, E, F | 4 |
| Glass blocks | | | |
| Glass block wall panels | | | |
| System 3: See CPD Annex III.2.(ii), Second possibility | | | |
| System 4 : See CPD Annex III.2.(ii), Third possibility | | | |

* Materials of class A that according to the Decision 96/603 do not require to be tested for reaction to fire.

3. Conditions to be applied by CEN on the specifications of the attestation of conformity system

3.1 The specification for the system should be such that it can be implemented even where performance does not need to be determined for a certain characteristic, because at least one Member State has no legal requirement at all for such characteristic [*see the "no performance determined" case under Article 2.1 of the CPD and when article 3.2 classes apply, clause 1.2.3 of the Interpretative Documents*]. In those cases the verification of such a characteristic must not be imposed on the manufacturer if he does not wish to declare the performance of the product in that respect.

3.2 Regarding products falling under system 3 for the initial type testing of the product [see Annex III.1.a) of the CPD] the task for the approved body will be limited to the following characteristics, where relevant :

Euroclasses characteristics for reaction to fire as indicated in Commission Decision 94/611/EC

| |
|---|
| Product family : flat glass, profiled glass and glass block products (3/6) |
|---|

1. Levels and classes for product performances1.1 *[text as for family (1/6)]*1.2 *[text as for family (1/6)]***2. Systems of attestation of conformity**

For the product(s) and intended use(s) listed below, CEN/CENELEC are requested to specify the following system(s) of attestation of conformity in the relevant harmonised standard(s) :

| Product(s) | Intended use(s) | Level(s) or class(es) | Attestation of conformity system(s) |
|--|---|--|-------------------------------------|
| Flat or curved glass panels | for uses subject to external fire performance regulations | products requiring testing | 3 |
| Channel-shaped glass | | ----- | ----- |
| Insulating glass units | | products "deemed to satisfy" without testing * | 4 |
| System 3: See CPD Annex III.2.(ii), Second possibility | | | |
| System 4 : See CPD Annex III.2.(ii), Third possibility | | | |

* to be confirmed in discussions with the Fire Regulators Group

3. Conditions to be applied by CEN on the specifications of the attestation of conformity system

3.1 The specification for the system should be such that it can be implemented even where performance does not need to be determined for a certain characteristic, because at least one Member State has no legal requirement at all for such characteristic [*see the "no performance determined" case under Article 2.1 of the CPD and when article 3.2 classes apply, clause 1.2.3 of the Interpretative Documents*]. In those cases the verification of such a characteristic must not be imposed on the manufacturer if he does not wish to declare the performance of the product in that respect.

3.2 Regarding products falling under system 3 for the initial type testing of the product [see Annex III.1.a) of the CPD] the task for the approved body will be limited to the following characteristics, where relevant :

External fire performance

Product family : **flat glass, profiled glass and glass block products (4/6)****1. Levels and classes for product performances**1.1 *[text as for family (1/6)]*1.2 *[text as for family (1/6)]***2. Systems of attestation of conformity**

For the product(s) and intended use(s) listed below, CEN/CENELEC are requested to specify the following system(s) of attestation of conformity in the relevant harmonised standard(s) :

| Product(s) | Intended use(s) | Level(s) or class(es) | Attestation of conformity system(s) |
|--|--|-------------------------|-------------------------------------|
| Flat or curved glass panels Insulating glass units Glass blocks Glass block wall panels | for use as anti-bullet, or anti-explosion glazing ----- for other uses liable to present "safety-in-use" risks and subject to such regulations | - ----- - | 1 ----- 3 |
| Channel-shaped glass | for uses liable to present "safety-in-use" risks and subject to such regulations | - | 3 |

System 1: See CPD Annex III.2.(i), without audit-testing of samples

System 3: See CPD Annex III.2.(ii), Second possibility

3. Conditions to be applied by CEN on the specifications of the attestation of conformity system

3.1 The specification for the system should be such that it can be implemented even where performance does not need to be determined for a certain characteristic, because at least one Member State has no legal requirement at all for such characteristic [*see the "no performance determined" case under Article 2.1 of the CPD and when article 3.2 classes apply, clause 1.2.3 of the Interpretative Documents*]. In those cases the verification of such a characteristic must

not be imposed on the manufacturer if he does not wish to declare the performance of the product in that respect.

- 3.2 Regarding products falling under systems 1 for the initial type testing of the product [see Annex III.1.a) of the CPD] the task for the approved body will be limited to the following characteristics, where relevant :

As relevant to anti-bullet or anti-explosion properties :-

Shatter properties (safe breakability) / Impact behaviour

Resistance to impact / attack

Mechanical resistance

- 3.3 For products falling under system 1, regarding the continuous surveillance, assessment and approval of the factory production control [see Annex III.1.g) of the CPD], parameters related to the following characteristics shall be of the interest of the approved body, where relevant :

As relevant to anti-bullet or anti-explosion properties :-

Shatter properties (safe breakability) / Impact behaviour

Resistance to impact / attack

Mechanical resistance

- 3.4 Regarding products falling under system 3 for the initial type testing of the product [see Annex III.1.a) of the CPD] the task for the approved body will be limited to the following characteristics, where relevant :

As relevant to “safety in use” properties :-

Shatter properties (safe breakability) / Impact behaviour

Resistance to impact / attack

Mechanical resistance

| |
|---|
| Product family : flat glass, profiled glass and glass block products (5/6) |
|---|

1. Levels and classes for product performances1.1 *[text as for family (1/6)]*1.2 *[text as for family (1/6)]***2. Systems of attestation of conformity**

For the product(s) and intended use(s) listed below, CEN/CENELEC are requested to specify the following system(s) of attestation of conformity in the relevant harmonised standard(s) :

| Product(s) | Intended use(s) | Level(s) or class(es) | Attestation of conformity system(s) |
|---|---|-----------------------|-------------------------------------|
| Flat or curved glass panels (specially treated) Channel-shaped glass Insulating glass units Glass blocks Glass block wall panels | for uses relating to energy conservation and / or noise reduction | - | 3 |
| System 3: See CPD Annex III.2.(ii), Second possibility | | | |

3. Conditions to be applied by CEN on the specifications of the attestation of conformity system

3.1 The specification for the system should be such that it can be implemented even where performance does not need to be determined for a certain characteristic, because at least one Member State has no legal requirement at all for such characteristic [*see the "no performance determined" case under Article 2.1 of the CPD and when article 3.2 classes apply, clause 1.2.3 of the Interpretative Documents*]. In those cases the verification of such a characteristic must not be imposed on the manufacturer if he does not wish to declare the performance of the product in that respect.

3.2 Regarding products falling under system 3 for the initial type testing of the product [see Annex III.1.a) of the CPD] the task for the approved body will be limited to the following characteristics, where relevant :

Thermal properties**Radiation properties****Direct airborne sound insulation**

Product family : **flat glass, profiled glass and glass block products (6/6)**

1. Levels and classes for product performances

1.1 *[text as for family (1/6)]*

1.2 *[text as for family (1/6)]*

2. Systems of attestation of conformity

For the product(s) and intended use(s) listed below, CEN/CENELEC are requested to specify the following system(s) of attestation of conformity in the relevant harmonised standard(s) :

| Product(s) | Intended use(s) | Level(s) or class(es) | Attestation of conformity system(s) |
|---|---|-----------------------|-------------------------------------|
| Flat or curved glass panels Channel-shaped glass Insulating glass units Glass blocks Glass block wall panels | for uses other than those specified in families (1/6), (2/6), (3/6), (4/6), (5/6) | - | 4 |
| System 4 : See CPD Annex III.2.(ii), Third possibility | | | |

3. Conditions to be applied by CEN on the specifications of the attestation of conformity system

3.1 The specification for the system should be such that it can be implemented even where performance does not need to be determined for a certain characteristic, because at least one Member State has no legal requirement at all for such characteristic [*see the "no performance determined" case under Article 2.1 of the CPD and when article 3.2 classes apply, clause 1.2.3 of the Interpretative Documents*]. In those cases the verification of such a characteristic must not be imposed on the manufacturer if he does not wish to declare the performance of the product in that respect.

ANNEX 4

DANGEROUS SUBSTANCES

European Technical Specifications must be adopted taking into account the necessary legislation on substances classified as dangerous.

This results from the Interpretative Documents, where it is noted in the introduction note to all six Interpretative Documents, that :

"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 material to be used for construction products, and which are regulated for reasons not related to the incorporation into the works of the construction products.

In order to permit technical specification writers to take into account the necessary legislation, a working document was elaborated by the Commission services (doc. CONSTRUCT 95/148 Rev.1 of January 4, 1996). Specification writers should use this document as a guide but must also take account of any other relevant legislation or dangerous substances which the working document does not yet include.