



marking under the
**Construction Products
Directive**

March 2001

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together with the National Assembly for Wales,
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and the Scottish Executive

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SECTION 1

Introduction

From 1 April 2001 it will be possible for cement to be placed on the UK market with CE marking based on a harmonised European Standard. By the end of 2001 it is estimated that CE marking will be possible for over 40 other construction products and within five years a total of over 600 products. CE marking has been possible for certain products since 1997, based on European Technical Approvals (ETAs). But the real increase in the visibility of CE marking will begin with the introduction of harmonised European Standards in 2001 and with an increase in the number of ETAs.

This publication aims to explain the implications of CE marking under the Construction Products Directive (CPD) for manufacturers, specifiers, certification and test bodies and regulatory/enforcement authorities. In the next section the main features of the Directive are summarised as 'bullet points'. Each of these is then amplified in the following four sections. Section 7 then deals with the transition phase from UK product specifications to the new European product specifications. Section 8 focuses on the implications of CE marking for UK practitioners, and the publication concludes with section 9 'Other sources of information'.

SECTION 2

The framework of the CPD

The CPD aims to break down technical barriers to trade in construction products between Member States in the European Economic Area (EEA). To achieve this the CPD provides for the following four main elements:

- a system of harmonised technical specifications
- an agreed system of attestation of conformity for each product family
- a framework of notified bodies
- the CE marking of products.

Note that the Directive does not aim to harmonise regulations. Member States and public and private sector procurers are free to set their own requirements on the performance of works and therefore products. What the CPD harmonises are the methods of test, the methods of declaration of product performance values, and the method of conformity assessment. Choice of required values for the chosen intended uses, is left to the regulators in each Member State.

SECTION 3

A system of harmonised technical specifications

3.1 General

Technical specifications are harmonised European product standards (hENs) produced by CEN/CENELEC or European Technical Approvals (ETAs) produced by the European Organisation for Technical Approvals (EOTA).

The purpose of the technical specification for a product is to cover all the performance characteristics required by regulations in any Member State. In this way manufacturers can be sure that the methods of test and methods of declaration of results will be the same for any Member State, (although the values chosen by regulators may be different from one Member State to another).

The preferred route under the CPD is for harmonised standards to be written wherever possible. But if standards cannot be produced or foreseen within a reasonable period of time, or if a product deviates substantially from a standard, then an ETA may be written.

ETAs may be written according to Guidelines (i.e. ETAGs) if several manufacturers of a particular product in several countries express an interest. If few manufacturers in only one or two countries express an interest, then ETAs may be issued without guidelines. These are called 'Article 9.2 ETAs'. ETAs have a validity period of 5 years.

3.2 Annex ZA

European product standards often address characteristics which are not regulated in any Member State, but which have been included for commercial reasons. Because of this, all harmonised product standards under the CPD include an Informative Annex (termed Annex ZA) the first part of which (ZA.1) lists the regulated requirements and the clauses in the standard in which they are addressed. Some of these clauses may in turn refer to separate supporting standards such as test standards.

In this way Annex ZA.1 in the harmonised standard becomes a checklist for CE marking from which the manufacturer can see all the possible requirements of his product and how they can be met.

The parts of the standard which are not required by regulations are termed the voluntary or non-harmonised parts of the standard. These are not included in Annex ZA.1.

For an ETAG, Chapter 4 serves the function of Annex ZA.1 in a harmonised standard.

SECTION 4

An agreed system of attestation of conformity for each product family

4.1 General

The attestation system is the term applied to the degree of involvement of third parties in assessing the conformity of the product according to the relevant technical specification(s). At present a significant barrier to trade arises from the different attestation levels required by Member States for the same product. Hence these requirements are also 'harmonised' under the Directive. For each product family the attestation system has been decided collectively by the Member States and the Commission on the basis of the implications for health and safety of the product, and on the particular nature and production process for the product itself.

4.2 Attestation systems and tasks

Six systems of attestation are used under the CPD as follows:

System 1+ Product conformity certification with audit testing.

1 Product conformity certification without audit testing.

2+ Factory production control (fpc) certification with continuous surveillance.

2 Factory production control (fpc) certification without surveillance.

3 Initial type testing.

4 Manufacturer's tasks only.

The tasks for the manufacturer and for the attestation body are summarised in Figure 1.

Note that for all systems, including the least onerous (system 4), the manufacturer is required to have a fully recorded fpc system. The criteria for this should be included in the technical specification.

The attestation procedures for a product are set out in the relevant technical specification. For standards these appear in Annex ZA.2 and for ETAGs in Chapter 8.

Figure 1 Attestation tasks under the CPD						
Conformity attestation	1+	1	2+	2	3	4
Commission numbering system						
Tasks for the manufacturer						
Factory production control	✓	✓	✓	✓	✓	✓
Further testing of samples taken at factory according to prescribed test plan	✓	✓	✓			
Initial type testing			✓	✓		✓
Tasks for the notified body						
Initial type testing	✓	✓			✓	
Certification of FPC	✓	✓	✓	✓		
Surveillance of FPC	✓	✓	✓			
Audit testing of samples	✓					
✓ = task required						

4.3 Manufacturer's declaration of conformity and technical file

Once a manufacturer has had all the appropriate attestation tasks carried out for his product he is required to complete a 'Declaration of conformity' which is kept with his technical file concerning the product. This may be supported by a certificate of product conformity, fpc certificate, test laboratory reports or certificates, and/or own test results, depending on the attestation system required.

An outline of the manufacturer's declaration of conformity and for the certificate of product conformity (if relevant), is included usually in Annex ZA.2 of the product standard or Chapter 8 of the ETAG.

SECTION 5

A framework of notified bodies

5.1 Attestation bodies

Notified attestation bodies are the product conformity certification bodies, fpc certification bodies, inspection bodies (in some countries) and test laboratories who are competent to carry out the attestation tasks described in the previous section. Such bodies are first approved by their respective Member States to carry out certain designated tasks, and then notified to the Commission and other Member States. Hence they are variously called 'approved bodies', 'designated bodies', or 'notified bodies' or sometimes 'Article 18 bodies' after the relevant clause in the Directive. They will be referred to as 'notified bodies' in the remainder of this publication.

UK bodies can be fully notified against a finalised technical specification, or somewhat in advance provided they are already working in a closely similar area (for example to a BS or draft hEN for the same product).

There is also a category called 'provisional notification' which can take place much further in advance of the final technical specification and for which the requirements are less exacting. Provisional notification allows notified bodies to prepare for working under the CPD, both in terms of getting suitable equipment, staff, etc. and to establish commercial links with manufacturers. It also provides an opportunity for bodies to get together with their European counterparts in the CPD 'Group of Notified Bodies' to discuss practical implementation matters so that there is a consistent approach to the tasks.

A list of UK fully and provisionally notified bodies, with their scopes, is included in the DETR web site (see Section 9). The site also includes guidance notes for certification and test bodies who wish to become notified.

Once a harmonised technical specification is available for his product a manufacturer required to use a notified body will be able to approach any such body in the European Economic Area for assessment according to the appropriate attestation procedure.

5.2 ETA approval bodies

These are organisations designated by their respective Member States as competent to assess products and on this basis to issue European Technical Approvals. Just as for notified bodies described in Section 5.1, ETA approval bodies are notified to the Commission and other Member States.

A list of UK ETA approval bodies, with their scopes, is included in the DETR web site (see Section 9). The site also includes criteria for ETA approval bodies, set out in a DETR guidance paper.

Note that the process of issuing the ETA in the first instance is a separate process from the subsequent attestation procedures (if any). Hence, once an ETA has been issued for a product, the manufacturer is free to choose another body to carry out the attestation procedures.

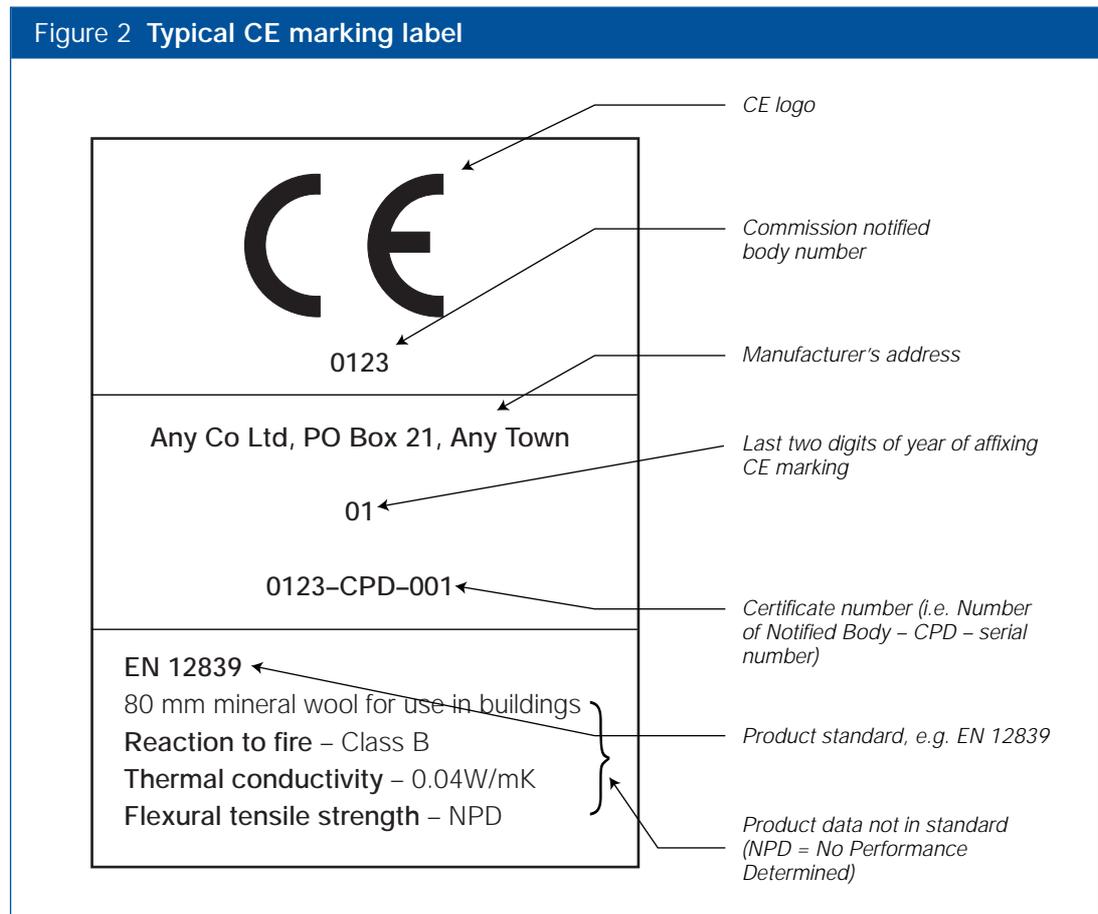
It has become accepted terminology to refer to the bodies described in this section as 'ETA approval bodies', as distinct from 'notified bodies', which applies to attestation bodies as described in Section 5.1 above.

SECTION 6

The CE marking of products

6.1 General

CE marking is a 'passport' enabling a product to be legally placed on the market in any Member State. However, as explained below, this does not necessarily mean that the product will be suitable for all end uses in all Member States. An example of CE marking is given in Figure 2.



The way in which CE marking should be approached for a specific product is set out in the technical specifications. For standards this is set out usually in Annex ZA.3 and for ETAGs in Chapter 8.

6.2 Responsibility for marking

Affixing the CE marking is the responsibility of the manufacturer or his agent or authorised representative established within the EEA.

6.3 Technical content

One of the most important aspects of the CE marking is that it includes technical information in the form of declared values. Where minimum or maximum values have been set in the standards themselves, these are not repeated in the CE marking. Similarly, classes of performance may be declared with the CE marking, with the 'key' to the classes appearing in the standard.

Hence the CE marking is in effect a harmonised technical data sheet. Together with the standard, it gives all the information needed by specifiers and regulators to judge whether the product is suitable for a particular intended use in the country in which it is sold, according to the regulations which apply there. Note that the manufacturer is not required to determine and declare values for which regulations do not exist in his chosen market sector (i.e. country/intended use). In these cases he may declare 'no performance determined' or NPD.

6.4 Quality marks

The CE marking is not a quality mark. It simply shows that the product addresses the regulatory requirements. Hence, quality marks are allowed to appear alongside the CE marking, provided their purpose cannot be confused.

SECTION 7

Transitional arrangements and incorporation into national regulations

7.1 Publication and coexistence

Following the date of availability of an hEN from CEN, the Commission will publish its reference in the 'C' series of the Official Journal of the European Communities. The reference will be accompanied by the date at which manufacturers across Europe may begin to apply CE marking to the product concerned – usually nine months after the date of availability of the hEN.

After this date a period of coexistence will then begin, during which manufacturers will be free to use the new hENs and apply CE marking, or continue to use the old national standards without CE marking. The length of the period will depend on the product concerned and will be set out in the standards. The usual period will be 12 months unless the Commission in consultation with the Member States have agreed a different period. The periods of coexistence for fire tests are likely to be somewhat longer than this.

After the period of coexistence, conflicting national standards must be withdrawn. For CE marking to be applied after the co-existence period, production must comply with the harmonised technical specification. However, products already in the supply chain will be considered to have already been 'placed on the market' and will not have to be removed after the period of coexistence.

The situation on transitional arrangements for standards is shown in Figure 3. The situation for ETAGs is shown in Figure 4 (note that for ETAGs the period of coexistence will usually be 24 months).

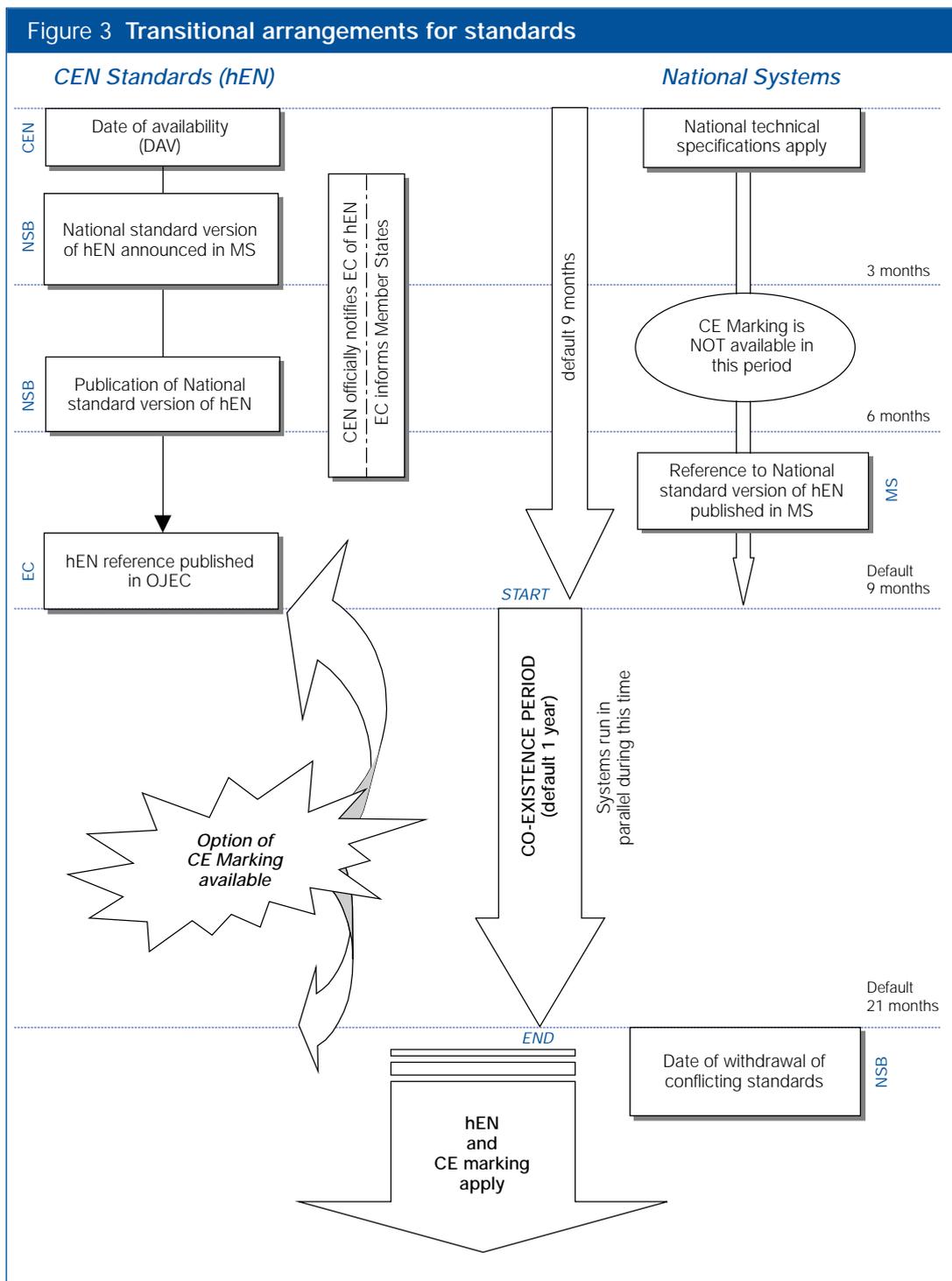
7.2 Modification of regulations

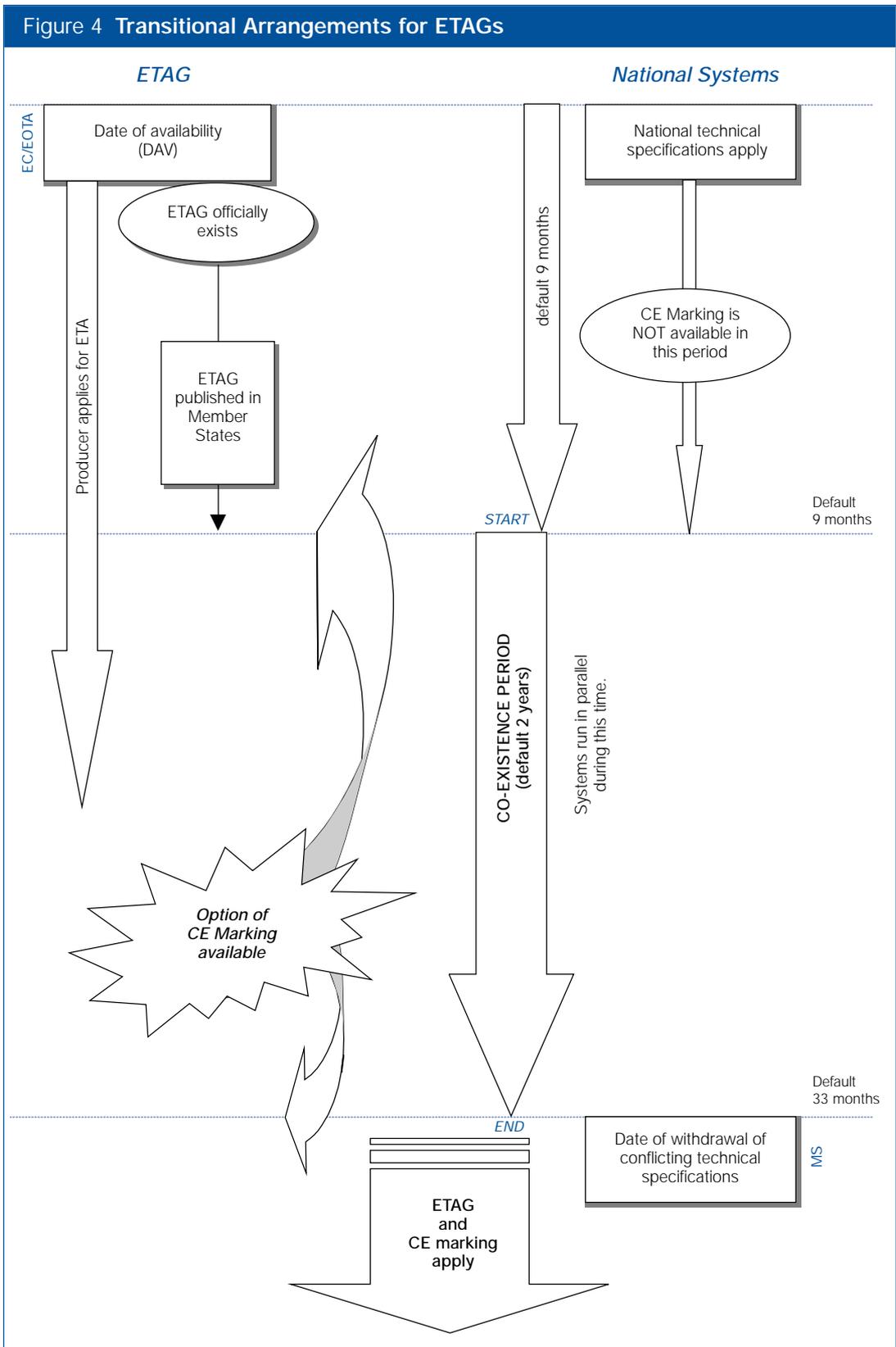
During the nine month period between the date of availability of the hEN and the beginning of CE marking, Member States, including the UK, will have to adapt their regulations and supporting documents so that products complying with the new hENs, and hence declaring data in the new way, will be equally acceptable as those complying with present national standards.

In the UK, reference to the acceptability of products with CE marking is already included in general terms in the Building Regulations Approved Documents (England and Wales), Technical Standards (Scotland) and Building Regulations and Technical Booklets

(Northern Ireland). But where specific references are made to product standards or technical approvals, or to codes of practice in which product standards are called up, then appropriate amendments will be made.

DETR, the Scottish Executive and the Department of Finance and Personnel in Northern Ireland will be publishing these amendments on a regular basis and incorporating them in the relevant documents at the first opportunity.





SECTION 8

Summary of implications for practitioners

- 8.1 From April 2001, the visibility of CE marking on construction products will begin to accelerate. In all, there will be over 600 product standards in support of the CPD, the majority of which will be available by 2006.
- 8.2 **Manufacturers and their trade associations** will need to be aware of progress on the technical specifications which apply to their products and will need to familiarise themselves with the technical content. For standards, the basis for CE marking is set out in Annex Z or for ETAGs in Chapter 8. If the attestation system requires involvement of a certification or test body, the manufacturer will need to commission a notified body to carry out the work. CE marking will be essential if manufacturers wish to export to countries in which CE marking is compulsory. Manufacturers who wish to export will need to determine, for the country of destination, the performance values required by the regulations of that country for the chosen intended use.
- 8.3 **Enforcement Authorities (Trading Standards Officers (England, Wales, Scotland) and Environmental Health Officers (Northern Ireland))**, will need to be aware of the significance of CE marking and the provisions of the UK implementing regulations namely 'The Construction Products Regulations (1991)', and its associated Joint Circular, and 'The Construction Products (Amendment) Regulations (1994)'.
- 8.4 **Building Control Bodies, specifiers, and other practitioners** will need to keep abreast of the introduction of product standards and ETAs, and amendments to Building Regulations and their supporting documents. These will include not only Approved Documents (England and Wales), Technical Standards (Scotland) and Technical Booklets (Northern Ireland), but also BS Codes of Practice and other linked documentation.
- 8.5 **Attestation bodies** will need to check progress on standards and ETAGs with a view to provisional notification for those whose introduction is some way off or full notification for those whose introduction is imminent. Membership of the UK Mirror Group for Notified Bodies will assist in this process. DETR guidance gives the criteria and procedures for notification. In advance of the introduction of standards/ETAGs attestation bodies may wish to establish links with relevant manufacturers.

SECTION 9

Further sources of information

British Board of Agrément (BBA)

UK spokesbody on EOTA: Tel: 01923 665300

Email: poddy@bba.star.co.uk

Building Research Establishment (BRE)

CPD Enquiries: Tel: 01923 664311

Email: cpdinfo@bre.co.uk

British Standards Institute (BSI)

Customer Services: Tel: 020 8996 9001

Email: info@bsi-global.com

Construction Products Association (CPA)

Enquiries: Tel: 020 7323 3770

Email: jtebbit@constprod.org.uk

Department of the Environment, Transport and the Regions (DETR)

CPD Enquiries: Tel: 020 7944 5727/5

Email: europe_br@detr.gov.uk

CPD web-site: www.construction.detr.gov.uk

Local Authorities Co-ordinating Body on Food and Trading Standards (LACOTS)

Enquiries: Tel: 020 7840 7203

Email: ron.gainsford@lacots.org.uk

Royal Institution of Chartered Surveyors (RICS)

Ian Macpherson: Tel: 01483 532249

Email: ianmcphsn@zetnet.co.uk

