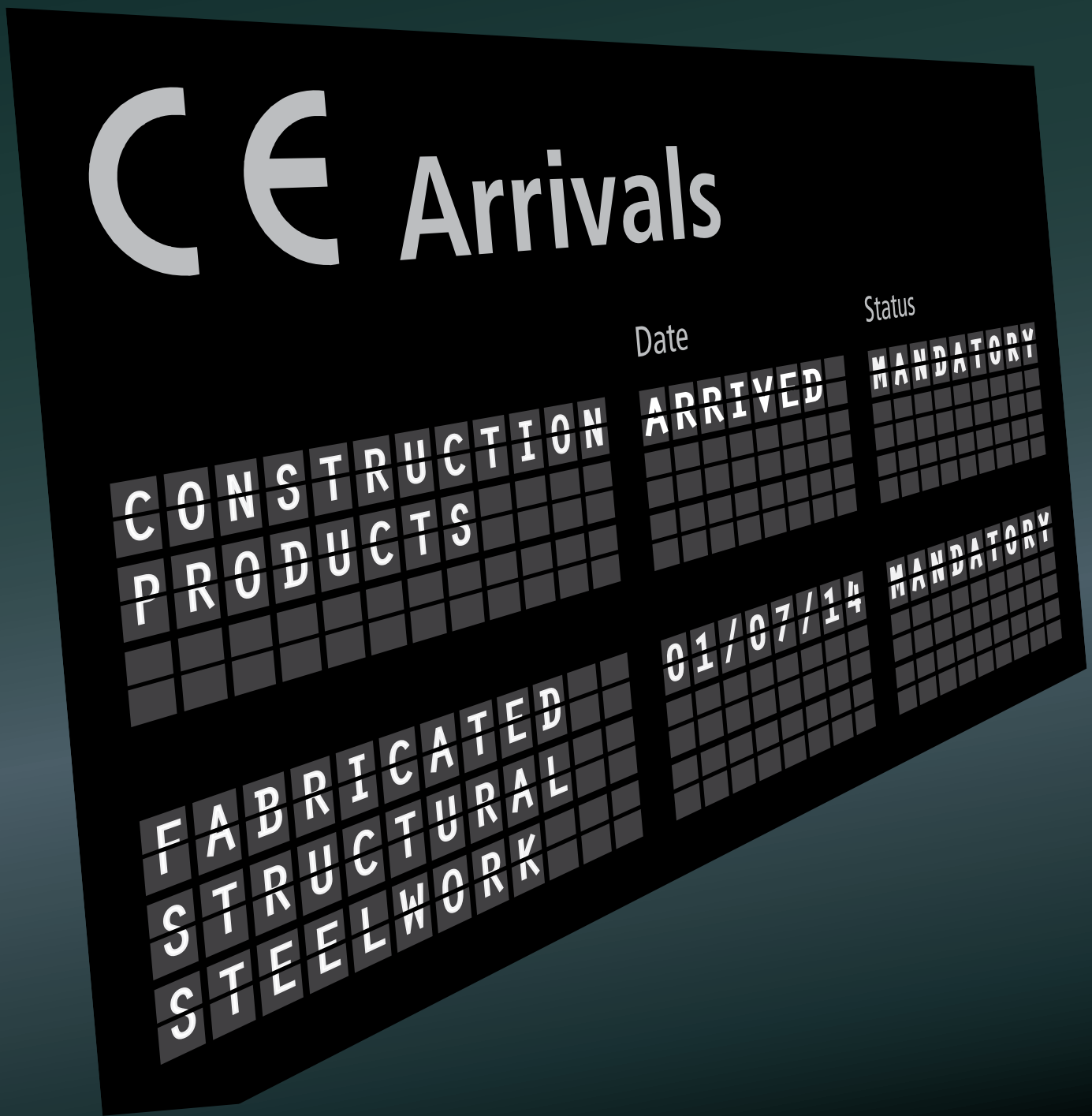
STEEL CONSTRUCTION
CE Marking

TATA STEEL

BCSA



Foreword

Sarah McCann-Bartlett,
Director General,
British Constructional
Steelwork Association

The construction industry is facing one of the most significant changes for a decade as CE Marking of construction products becomes mandatory in all Member States throughout the European Union and the European Economic Area.

CE Marking for all construction products, covered by a harmonised European standard or conforming to a European Technical Assessment, became mandatory from 1 July 2013. Manufacturers, such as Tata Steel, CE Marked their products well in advance of the deadline to ensure that there was no disruption to material supply.

For fabricated structural steelwork, CE Marking will become mandatory on 1 July 2014. This represents a major development for engineers, contractors and steelwork specialists and it demands careful attention to the new obligations imposed.

This supplement highlights how the steel construction sector has been working behind the scenes towards achieving CE Marking. Perhaps more importantly, it spells out in detail what it will mean for the rest of the construction sector and the straightforward process that you need to follow in order to comply with the Construction Products Regulation, which is the legal basis for the new regime.

The steel sector is already making excellent progress, so there will be no disruption to the regular supply of fabricated structural steelwork from accredited sources. The BCSA has made CE Marking compliance a condition of membership of the Association after 1 July 2014. By using a BCSA Members steelwork contractor, clients, main contractors and insurers can be assured that due diligence has already been undertaken by the BCSA as part of their membership audit.

I'm sure you will find this supplement helpful.

August 2013

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This information on CE Marking in steel construction is available at www.steelconstruction.info/CE_marking

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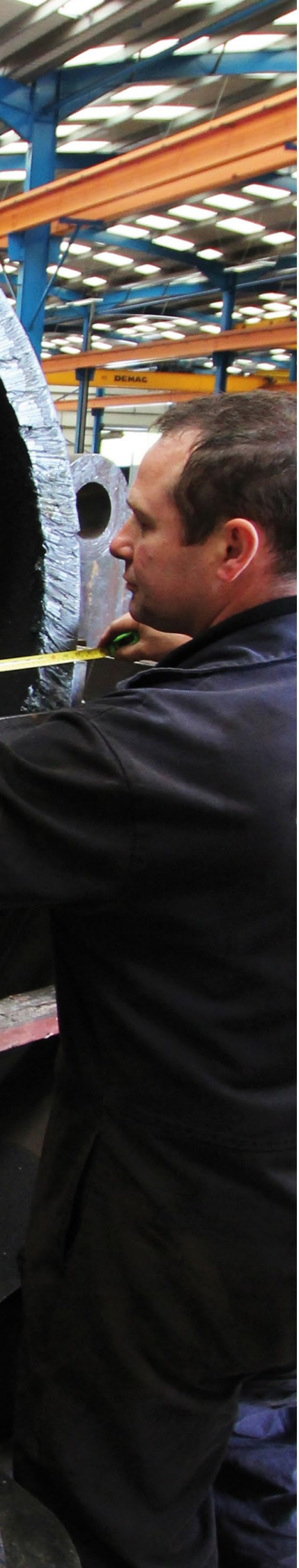
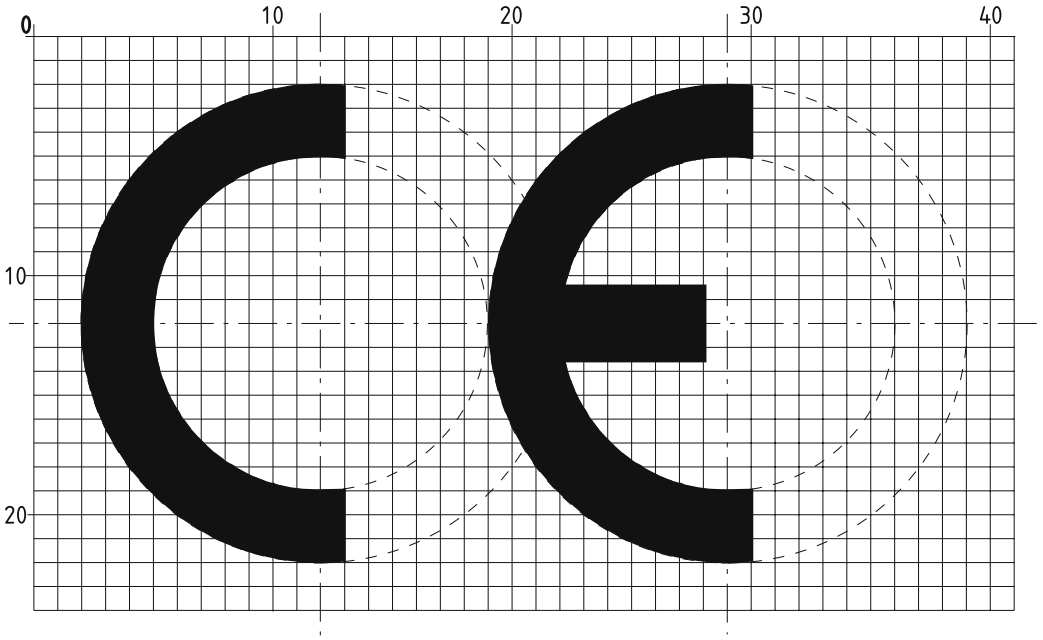


Introduction



CE Marking (formerly Conformité Européenne) demonstrates compliance with the appropriate manufacturing standard for a product. As a symbol, it will be familiar as it has been a requirement for many years on products sold in the European Union such as toys and electrical goods.

Under the Construction Products Regulation (CPR), new legal obligations have been placed on manufacturers, distributors and importers of construction products used within the EU to CE Mark their products where they are covered by either a harmonised standard or European Technical Assessment (ETA). This applies not only to constituent products (such as steel beams, bolts etc) but also to fabricated elements and systems made from CE Marked products. In the UK, penalties for non-compliance include suspension notices, prohibition notices, notices to warn and application for forfeiture. For certain offences the penalties may include a fine, imprisonment or both.

The CPR required the CE Marking of all construction products from 1 July 2013. CE Marking of fabricated structural steelwork will be mandatory from 1 July 2014.

The CPR describes the legal obligations it places on the construction supply chain in terms of ‘manufacturers’, ‘distributors’ and ‘importers’. However, the construction supply chain in the UK would normally be described in terms of clients, designers, specifiers, contractors and specialist subcontractors. The purpose of this document is to provide some guidance to the UK supply chain on the implications of the CPR on steel construction.

The requirements of the CPR and CE Marking apply to construction products used on a project irrespective of whether that project has been designed to National Standards (i.e. BS 5950) or to the Eurocodes.

CE Marking of products

Under the CPR, all products used in construction must now have CE Marking to demonstrate compliance where either a harmonised standard or ETA is in force. All mainstream construction products are covered by harmonised standards and must therefore be CE Marked.

Specifications should have been amended to ensure only CE Marked products are now used on projects

For fabricated structural steelwork, engineers, contractors and steelwork contractors should have amended their specifications accordingly to ensure only CE Marked products are used on their projects.

This has not caused any disruption in the supply of material as manufacturers, such as Tata Steel with their Advance section range and Celsius® 355 and Hybox® 355 structural hollow sections had been CE Marking their products for a number of years in anticipation of the CPR requirement and publish their declarations of performance at www.tatasteeleurope.com/dop

Product standards for CE Marking

Mandatory for products

open sections – BS EN 10025-1

hollow sections

- hot finished – BS EN 10210-1
- cold formed welded – BS EN 10219-1

plates – BS EN 10025-1

structural bolts

- non-preloaded structural bolting assemblies – BS EN 15048-1
- high strength structural bolting assemblies for preloading – BS EN 14399-1

Mandatory for steelwork delivered on or after 1 July 2014

fabricated structural steelwork – BS EN 1090-1

Note:

1. a full list of harmonised standards can be found on the EU's Nando website – *www.ec.europa.eu/enterprise/newapproach/nando/index.cfm?fuseaction=cpd.hs*
2. a full list of ETAs can be found on the EOTA website – *www.eota.be/pages/valideta*

CE Marking of fabricated structural steelwork

The harmonised standard covering fabricated structural steelwork is BS EN 1090: Execution of steel structures and aluminium structures.

Part 1 of the standard is the Requirements for Conformity Assessment of Structural Components. It describes how manufacturers can demonstrate that the **components** they produce meet the declared performance characteristics (the structural characteristics which make them fit for their particular use and function).

Specifications

Contracts for fabricated structural steelwork to be delivered to site on or after 1 July 2014 should include the following specifications, which incorporate the obligations of BS EN 1090-1 and BS EN 1090-2 on the steelwork contractor:

Buildings

- National Structural Steelwork Specification (NSSS) for Building Construction 5th Edition CE Marking Version

Bridges

- Model Project Specification for the Execution of Steelwork in Bridge Structures (SCI Guide P382) revised January 2012

Part 2 is the Technical Requirements for Steel Structures. It specifies the requirements for the execution of steel **structures** to ensure adequate levels of mechanical resistance and stability, serviceability and durability. It determines the performance characteristics for components that the manufacturer must achieve and declare through the requirements of Part 1.

BS EN 1090-1 becomes mandatory on 1 July 2014. It will therefore be a legal requirement for all fabricated structural steelwork delivered to site from that date to be CE Marked.

The BCSA has made CE Marking compliance a condition of membership of the Association from 1 July 2014, so selection of any BCSA Member company will guarantee that the steelwork contractor will have the necessary certification to comply with the CPR requirements. Clients and main contractors will therefore have confidence in the complete supply chain for steel construction from manufacture of the steel sections through distribution to fabrication and erection on site.

Engineer's responsibility

For any project, the required quality of fabrication or Execution Class must be specified. BS EN 1090-2 requires the Execution Class to be specified for:

- the works as a whole
- an individual component
- a detail of a component

The engineer is responsible for specifying the Execution Class for the structure, the components and the details. In some cases the Execution Class for the structure, the components and the details will be the same while in other cases the Execution Class for the components and the details may be different to that for the whole structure.

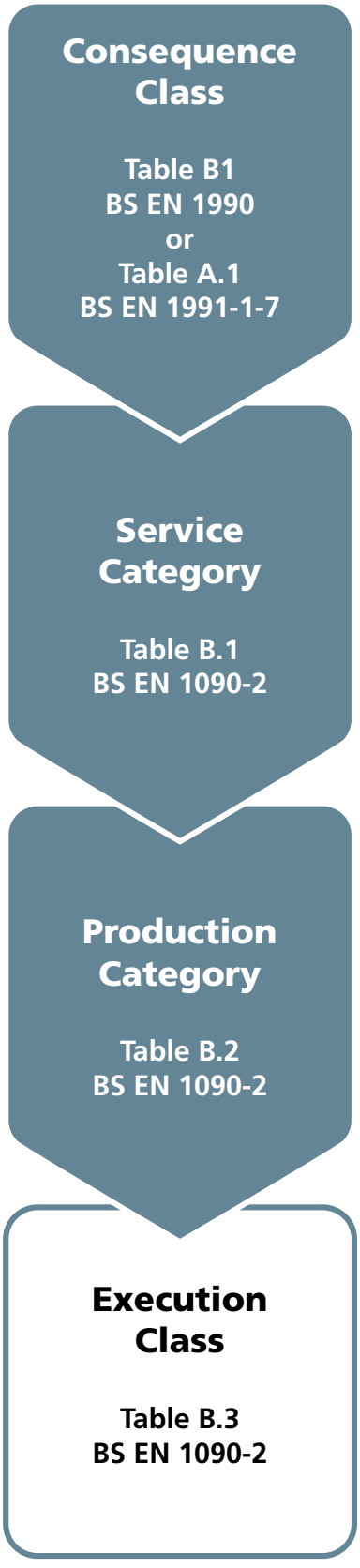
The procedure for determining the Execution Class is a straightforward four step process:

1. Determine the Consequence Class
2. Define the Service Category
3. Define the Production Category
4. Derive the Execution Class

Summary
EXC2 will be the appropriate requirement for the majority of buildings constructed in the UK

Whilst each building needs to be considered on its own merits, Execution Class 2 (EXC2) will be appropriate for the majority of buildings constructed in the UK. If the Execution Class is not specified on a project, Clause 4.1.2 of BS EN 1090-2 states that EXC2 shall apply.

It should also be noted that the NSSS for Building Construction 5th Edition CE Marking Version has been written for the steelwork contractor to deliver the requirements of EXC2.



1. Determine the Consequence Class

Step 1
CC2 will be appropriate for the majority of buildings constructed in the UK

The purpose of categorising the Consequence Class is to ensure that buildings (and other structures) are constructed with the appropriate level of quality control within the fabrication process. Consequence Classes are derived on the basis of building type, building height (number of storeys), floor plan area per storey (for retail) and occupancy. A structure, or a part of it, could also contain components with different Consequence Classes.

BS EN 1990 gives guidelines for the choice of Consequence Class in Table B1 (below).

Table B1	Definition of Consequence Classes	
Consequence Class	**Description**	**Examples of buildings and civil engineering works**
CC3	**High** consequence for loss of human life ***or*** economic, social or environmental consequences **very great**	Grandstands, public buildings where consequences of failure are high (eg a concert hall)
CC2	**Medium** consequence for loss of human life; economic, social or environmental consequences **considerable**	Residential and office buildings, public buildings where consequences of failure are medium (eg an office building)
CC1	**Low** consequence for loss of human life ***and*** economic, social or environmental consequences **small** or **negligible**	Agricultural buildings where people do not normally enter (eg storage buildings), greenhouses

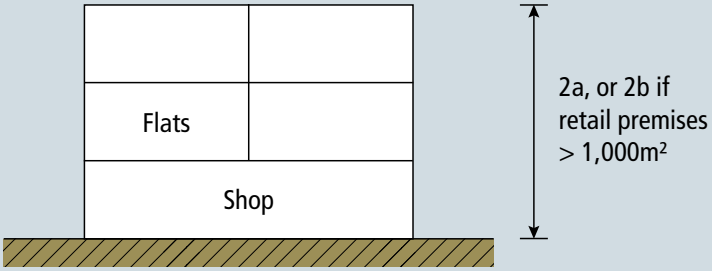
Table A.1 of BS EN 1991-1-7 (below) gives examples of categorisation of building type and occupancy according to Consequence Classes that assist with the implementation of Annex B of BS EN 1990.

Table A.1	Categorisation of Consequence Classes
Consequence Class	**Example of categorisation of building type and occupancy**
1	Single occupancy house not exceeding 4 storeys. Agricultural buildings. Buildings into which people rarely go, provided no part of the building is closer to another building, or area where people do go, than a distance 1½ times the building height
2a Lower Risk Group	5 storey single occupancy houses. Hotels not exceeding 4 storeys. Flats, apartments and other residential buildings not exceeding 4 storeys. Offices not exceeding 4 storeys. Industrial buildings not exceeding 3 storeys. Retailing premises not exceeding 3 storeys or less than 1,000m² floor area in each storey. Single storey educational buildings. All buildings not exceeding 2 storeys to which the public are admitted and which contain floor areas not exceeding 2,000m² at each storey.
2b Upper Risk Group	Hotels, flats, apartments and other residential buildings greater than 4 storeys but not exceeding 15 storeys. Educational buildings greater than a single storey but not exceeding 15 storeys. Retailing premises greater than 3 storeys but not exceeding 15 storeys. Hospitals not exceeding 3 storeys. Offices greater than 4 storeys but not exceeding 15 storeys. All buildings to which the public are admitted and which contain floor areas exceeding 2,000m² but not exceeding 5,000m² at each storey. Car parking not exceeding 6 storeys.
3	All buildings defined above as Class 2 Lower and Upper Consequence Class that exceed the limits on area and number of storeys. All buildings to which members of the public are admitted in significant numbers. Stadia accommodating more than 5,000 spectators. Buildings containing hazardous substances and/or processes.

Notes:
1. For buildings intended for more than one type of use the 'Consequence Class' should be that relating to the most onerous type.
2. In determining the number of storeys, basement storeys may be excluded provided such basement storeys fulfil the requirements of 'Consequences Class 2b Upper Risk Group'
3. UK Building Regulations Approved Document A contains a similar table to A.1 of EN 1991-1-7 which may also be used to determine the Consequence Class.

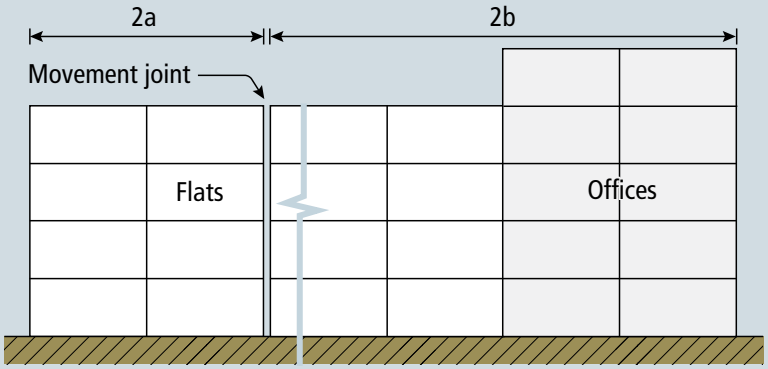
SCI Guide P391 provides guidance on classification of mixed-use buildings and buildings with basements. **(Note**: as classification classes are also used to determine the robustness strategy for a building, some of the guidance is dependent on the robustness strategy adopted, particularly where basements are present.)

2 storeys of flats over one storey of retailing premises. This case should be considered as 3 storeys of retailing premises. Therefore, apply Class 2a to the whole building, or apply Class 2b to the whole building if floor area of retailing premises is 1000m² or more (per storey).

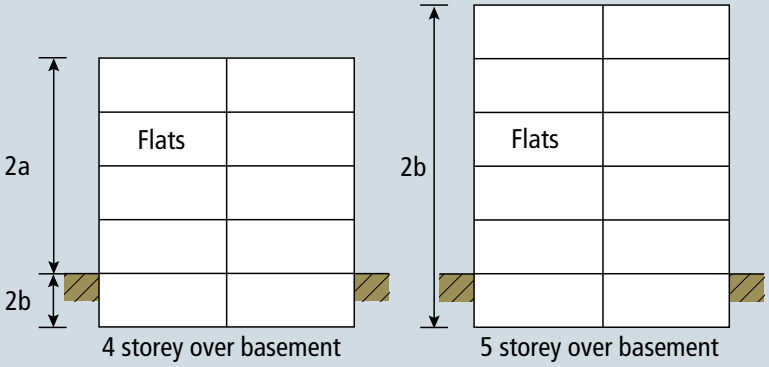


2 storeys of flats over 2 storeys of retailing premises. This case should be taken as 4 storeys of retailing premises. Therefore, apply Class 2b to the whole building.

4 storeys of flats adjacent to 5 storeys of offices. Class 2b should be applied to the 5 storey office area and extending to a suitable structural discontinuity in the 4 storey residential area and Class 2a should be applied to the remaining 4 storey residential area.



In determining the number of storeys for classification, basement storeys may be excluded if they fulfil the robustness requirements of Class 2b buildings. Otherwise, the basement storeys must be included in determining the number of storeys for building classification. The basement can be for habitable accommodation or parking.



2. Define Service Category

Step 2
SC1 will be appropriate for the majority of buildings constructed in the UK

Service categories are the method used in BS EN 1090-2 to consider the risk from the actions to which the structure and its parts are likely to be exposed to during erection and use, such as fatigue and likelihood of seismic actions. They also consider the stress levels in the components in relation to their resistance.

Service categories are determined from Table B.1 of BS EN 1090-2 but for most buildings in the UK, SC1 will be appropriate.

Table B.1	Suggested Criteria for Service Categories
Categories	**Criteria**
SC1	• Buildings and components designed for quasi static actions only (Example: Buildings) • Structures and components with their connections designed for seismic actions in regions with low seismic activity and in DCL* • Structures and components designed for fatigue actions from cranes (class S_0)**
SC2	• Structures and components designed for fatigue actions according to EN 1993. (Examples: Road and railway bridges, cranes (class S_1 to S_9)**, structures susceptible to vibrations caused by wind, crowd or rotating machinery.) • Structures and components with their connections designed for seismic actions in regions with medium or high seismic activity and in DCM* and DCH*.

Notes:
* DCL, DCM, DCH: ductility classes according to EN 1998-1.
** For classification of fatigue actions from cranes, see EN 1991-3 and EN 13001-1.

3. Define Production Category

Step 3
Execution Class is not sensitive to the Production Category

Production categories are the method used in BS EN 1090-2 to consider the risk from the complexity of the fabrication of the structure and its components, e.g. application of particular techniques, procedures or controls.

Production categories are determined from Table B.2 of BS EN 1090-2 and it should be noted that a structure or part of a structure may contain components or structural details that belong to different production categories.

However, in all cases, the Execution Class is not sensitive to the Production Category selected.

Table B.2	Suggested Criteria for Production Categories
Categories	**Criteria**
PC1	• Non welded components manufactured from any steel grade products • Welded components manufactured from steel grade products below S355
PC2	• Welded components manufactured from steel grade products from S355 and above • Components essential for structural integrity that are assembled by welding on construction site • Components with hot forming manufacturing or receiving thermic treatment during manufacturing • Components of CHS lattice girders requiring end profile cuts

4. Derive Execution Class

Having determined the Consequence Class, Service Category and Production Category for a building, the required Execution Class is derived simply from Table B.3 of BS EN 1090-2.

Table B.3		Recommended Matrix for Determination of Execution Classes					
Consequence classes		**CC1**		**CC2**		**CC3**	
Service categories		SC1	SC2	SC1	SC2	SC1	SC2
Production categories	PC1	EXC1	EXC2	EXC2	EXC3	EXC3 [a]	EXC3 [a]
	PC2	EXC2	EXC2	EXC2	EXC3	EXC3 [a]	EXC4
[a] EXC4 should be applied to special structures or structures with extreme consequences of a structural failure as required by national provisions							

Note:
Annex B of BS EN 1090-2 is classed as 'informative'. Therefore the approach described is not mandatory and the engineer can base the selection of Execution Class on experience provided they can support their decision.

Step 4
EXC2 will therefore be appropriate for the majority of buildings constructed in the UK

For the majority of buildings constructed in the UK, EXC2 will be the appropriate requirement. Where no Execution Class is specified, Clause 4.1.2 of BS EN 1090-2 states that EXC2 shall apply.

The engineer should always derive the Execution Class based on the design parameters appropriate to each project. The requirements to each Execution Class are listed in Table A3 of BS EN 1090-2 and can be reviewed by the engineer if desired.

However, the engineer should avoid over-specification of the Execution Class wherever possible to avoid unnecessary costs being introduced. For example, EXC2 is the Execution Class derived for a project but the engineer requires full traceability (an EXC3 requirement) instead of the partial (or batch) traceability requirement of EXC2. Rather than specifying EXC3 on the basis of achieving this single Clause requirement, it is suggested that EXC2 is still specified but with the higher level of traceability added to the specification.

Steelwork contractor requirements for CE Marking

In order to be able to CE Mark the fabricated structural steelwork that they produce, steelwork contractors are required to declare performance to the System 2+ level of assessment (as described in Annex V of the CPR). This requires them to undertake:

- initial type-testing of the product
- Factory Production Control (FPC), which will include
  - implementation of FPC system procedures
  - appointment of a responsible welding coordinator (RWC)
  - implementation of welding quality management system (WQMS) procedures
- further testing of samples taken at the factory in accordance with the prescribed test plan

They must also be assessed by a notified body that will carry out:

- initial inspection of the manufacturing plant
- initial inspection of the FPC
- continuous surveillance, assessment and approval of the FPC, which will typically include:
  - an annual audit to ensure continued competence to the declared Execution Class (Table B.3 of BS EN 1090-1 sets out minimum levels for the routine surveillance intervals)

The notified body will then issue a FPC certificate and Welding Certificate identifying the Execution Class that the steelwork contractor has achieved.

Client and/or main contractor's responsibility

For all fabricated structural steelwork delivered to site from 1 July 2014, there is a legal requirement under the CPR that it is CE Marked.

In order to achieve this, the client or main contractor should appoint a steelwork contractor with an Execution Class equal to that required for the project, as determined by BS EN 1090-1. It should be noted that steelwork contractors with EXC3 capability can be used for EXC1, 2, & 3; and a steelwork contractor with EXC2 capability can only be used for EXC1 & 2.

Selecting a BCSA Member will ensure CE Marking compliance

Compliance with the requirements of BS EN 1090-1 is no small task and places obligations on the steelwork contractor that are onerous and take significant time to put into place. To eliminate the risk of non-compliance with the CPR, it is recommended that clients and main contractors only award projects that will have fabricated structural steelwork delivered to site after 1 July 2014 to steelwork contractors who have already achieved (or are close to achieving) CE Marking accreditation.

The BCSA has made CE Marking compliance a condition of membership of the Association from 1 July 2014, so selection of a BCSA Member company will guarantee that the steelwork contractor will have the necessary accreditation to comply with the CPR requirements.

ABC Engineering Ltd

Buildings Categories: C, D, E, F, G, H, J, K, L, M, N, R
Guide Contract Value: above £6,000,000
Accredited Certification: WQMS-C, EM, HSM, QM, FPC-EXC4
SCSC: Gold Member
Membership: SCCS | SCSC | BCSA

The directories for buildings and bridgeworks on BCSA's website (*www.steelconstruction.org*) include details of accredited certification levels achieved by each member. Clients and main contractors can use this to find steelwork contractors with an Execution Class equal to that required for their project. It also states the level of accreditation achieved by those steelwork contractors who are moving towards achieving CE Marking.

Contract documentation should also be updated to incorporate CE Marked version of NSSS 5th Edition, which incorporates the obligations of BS EN 1090-1 and BS EN 1090-2 on the steelwork contractor.

It should be noted that if a non-EU steelwork contractor is used on a project, the CPR puts liability on clients and/or main contractors. In that instance, the party engaging the steelwork contractor would be classed as an importer under the CPR and must comply with 'Obligations of Importers' given in Article 13 of the regulations.

How to check compliance with the CPR and CE Marking

In order for a steelwork contractor to demonstrate their right to CE Mark their products, they must provide the following three documents:

1. Factory Production Control (FPC) Certificate – issued by a notified body
2. Welding Certificate – issued by a notified body
3. Declaration of Performance (DoP) – issued by the steelwork contractor

CE Marked fabricated steelwork must be supported by a Factory Production Control (FPC) Certificate, a Welding Certificate and a Declaration of Performance

The client or main contractor engaging the steelwork contractor should carry out due diligence before appointing any steelwork contractor who will be delivering fabricated structural steelwork to site on or after 1 July 14. Likewise, insurers should complete a similar due diligence process before giving Professional Indemnity insurance to a steelwork contractor who wants to CE Mark their products.

As the BCSA has made CE Marking compliance a condition of membership after this date, simply selecting a BCSA Member will ensure compliance with the regulations. The client, main contractor or insurer would not need to carry out due diligence of the steelwork contractor in this case since it has already been undertaken by the BCSA as part of their membership audit.

SCCS

Steel Construction Certification Scheme Limited
4 Whitehall Court, Westminster, London SW1A 2ES
Tel: +44 (0) 20 7839 3980
Fax: +44 (0) 20 7747 8199
Email: sccs@steelconstruction.org
www.steelconstruction.org

EC Certificate of Factory Production Control (FPC)

4 **2273 – CPR - 001**

In compliance with the Construction Products Regulation or CPR, it has been stated that the construction product:

Structural Components for Steel Structures

Harmonised	Type / Execution Class of the Construction Product	Declaration Method
EN 1090-1: 2009 +A1:2011	Load bearing and welded structural steel components up to EXC 2 according to EN 1090-2:2008 +A1:2011	1, 2, 3a and 3b table A.1 of EN 1090-1:2009 +A1:2011

1

placed on the market by

ABC Engineering Ltd

and produced in the factory(ies)

Thrimpson Plant, Thrimpson Road, Grillnik, Pondington, West Plumshire PM15 7TL
Gunburton McAvis Plant, Nyasa Way, Spent, East Plumshire BO42 9RF
Lydecker & Lydecker Plant, Grimwade Road, Hulke, Adamshire AD4 8BB

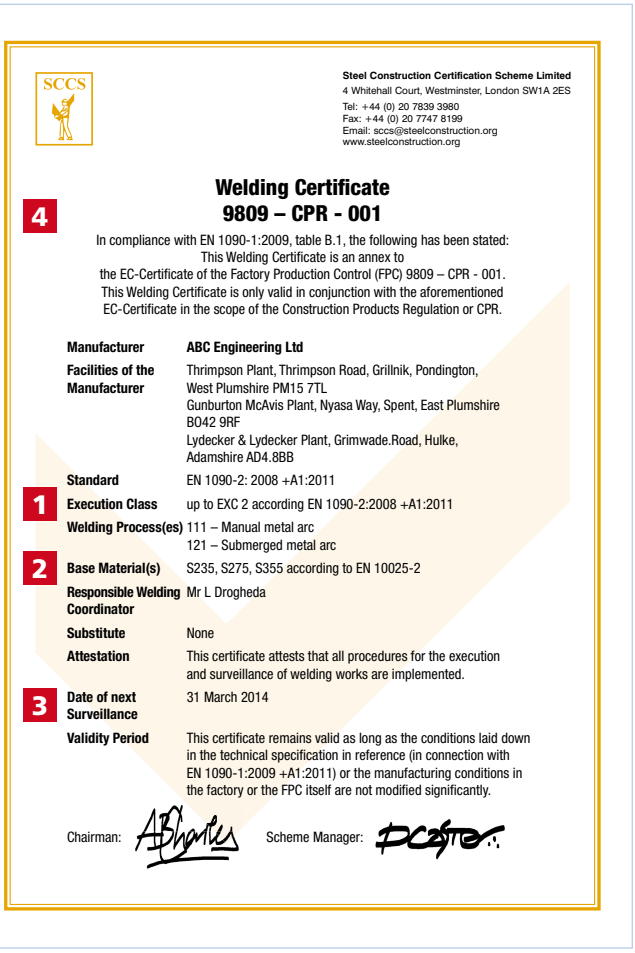
is submitted by the manufacturer to the initial type-testing of the product, a factory production control and to the further testing of samples taken at the factory in accordance with a prescribed test plan and that the notified body No. 2273 – Steel Construction Certification Scheme Ltd - has performed the initial inspection of the factory and of the factory production control and performs the continuous surveillance, assessment and approval of the factory production control.

Attestation This certificate attests that all provisions concerning the attestation of factory production control described in Annex ZA of the standard: **EN 1090-1: 2009 +A1:2011** were applied.

3 **Date of next Surveillance** by 31 March 2014

Validity Period This certificate remains valid as long as the conditions laid down in the harmonised standard in reference or the manufacturing conditions in the factory or the FPC itself are not modified significantly

Chairman: ABCharles Scheme Manager: DCaster



SCCS

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Fax: +44 (0) 20 7747 8199
Email: sccs@steelconstruction.org
www.steelconstruction.org

Welding Certificate 9809 – CPR - 001

4 In compliance with EN 1090-1:2009, table B.1, the following has been stated:
This Welding Certificate is an annex to
the EC-Certificate of the Factory Production Control (FPC) 9809 – CPR - 001.
This Welding Certificate is only valid in conjunction with the aforementioned EC-Certificate in the scope of the Construction Products Regulation or CPR.

Manufacturer ABC Engineering Ltd

Facilities of the Manufacturer Thrimpson Plant, Thrimpson Road, Grillnik, Pondington, West Plumshire PM15 7TL
Gunburton McAvis Plant, Nyasa Way, Spent, East Plumshire B042 9RF
Lydecker & Lydecker Plant, Grimwade.Road, Hulke, Adamshire AD4.8BB

Standard EN 1090-2: 2008 +A1:2011

1 **Execution Class** up to EXC 2 according EN 1090-2:2008 +A1:2011

Welding Process(es) 111 – Manual metal arc
121 – Submerged metal arc

2 **Base Material(s)** S235, S275, S355 according to EN 10025-2

Responsible Welding Coordinator Mr L Drogheda

Substitute None

Attestation This certificate attests that all procedures for the execution and surveillance of welding works are implemented.

3 **Date of next Surveillance** 31 March 2014

Validity Period This certificate remains valid as long as the conditions laid down in the technical specification in reference (in connection with EN 1090-1:2009 +A1:2011) or the manufacturing conditions in the factory or the FPC itself are not modified significantly.

Chairman: ABCharles Scheme Manager: DCaster

What to check – Factory Production Control and Welding Certificates

1. Declared performance – ensure that the steelwork contractor meets or exceeds the Execution Class requirements for the project.
2. Base materials – the steelwork contractor is covered for welding with material strength and subgrades up to and including those declared on the Welding Certificate. Ensure that these are consistent with the requirements of the project.
3. Date of next surveillance – check that the certificate is still current and covers the period of the contract.
4. Notified body number – check on the EU's Nando website to ensure that it is a valid and current number associated with the notified body named on each certificate.

What to check – Declaration of Performance

The scope of the DoP to be issued by the steelwork contractor for each project is set out in Article 6 of the CPR, with a standard form included as Annex III. The standard form in Annex III covers all aspects of the CPR, whereas the example below suggests what would be appropriate to include when CE Marking fabricated structural steelwork along with some comments that might be helpful in interpreting the intent of the DoP standard form.

Declaration of Performance
A No. 1234

Type	**B** ABCD
Intended Use	**C** Structural steelwork construction components and/or kits for use in building and civil engineering works
Manufacturer	ABC Engineering Ltd, Thrimpson Road, Grillnik, Pondington, West Plumshire PM15 7TL
Verification of constancy	System 2+
Notified Body	Steel Construction Certification Scheme 4, Whitehall Court, Westminster, London SW1A 2ES
Notified Body No	2773

SCCS has performed (i) initial inspection of the manufacturing plant and factory product control and (ii) continuous surveillance, assessment and evaluation of factory production control and issued Factory Production Control Certificate 2273-CPR-001 and Welding Certificate 9809-CPR-001.

Essential characteristics **E**	Performance **D**	Harmonised technical specification
Tolerances on dimensions and shape	EN 1090-2, tolerance class 1	EN 1090-1: 2009
Weldability	EN 10025-2, S275	EN 1090: 2009
Fracture toughness/impact resistance	S275JR (27J @ 20°C)	EN 1090: 2009
Load bearing capacity	NPD	EN 1090: 2009
Fatigue strength	NPD	EN 1090: 2009
Resistance to fire	NPD	EN 1090: 2009
Reaction to fire	Class A1 (steel only)	EN 1090: 2009
Release of cadmium and its compounds	NPD	EN 1090: 2009
Radioactivity	NPD	EN 1090: 2009
Durability	Surface preparation according to BS EN 1090-2, Preparation grade P3. Surface painted according to BS EN ISO 12944.	EN 1090: 2009

The performance of the product identified above is in conformity with the declared performance identified in the table.

Signed for and on behalf of ABC Engineering Ltd by:

John Smith, Director
Pondington, Plumshire
1 April 2013

A Steelwork contractor's unique DoP Certificate identification number.

B Steelwork contractor defined (may be omitted if not relevant).

C Brief description of use, which may include project name and location.

D Check that notified body and level of assessment declared is consistent with the FPC and Welding Certificates where appropriate.

E Steelwork Contractors are not required to declare performance against all of the performance characteristics in Table ZA.1 of BS EN 1090-1 +A1:2011, but only those that are appropriate and for which they are responsible.

Summary

Overview

It is now a legal requirement to use CE Marked construction products. This did not cause any disruption in the supply of materials for fabricated structural steelwork as manufacturers, such as Tata Steel, had been CE Marking their products for a number of years in anticipation of the CPR requirement.

From 1 July 2014, it will be a legal requirement for all fabricated structural steelwork delivered to site to be CE Marked. In order to comply with the regulations, only steelwork contractors with an Execution Class equal to that required for a project should be considered.

Contracts for fabricated structural steelwork to be delivered to site on or after this date should include the NSSS for Building Construction 5th Edition CE Marking Version or Model Specification for the Execution of Steelwork in Bridge Structures (revised January 2012). Both of these specifications incorporate the obligations of the CPR and CE Marking on the steelwork contractor.

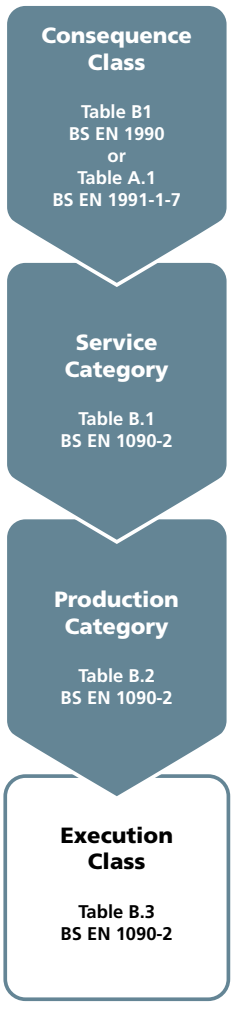
Engineer's responsibility

The engineer is responsible for specifying the Execution Class for the structure as a whole, the components and the details that they have designed.

Procedure for specification of Execution Class for a project:

1. Determine Consequence Class – Table B1, BS EN 1990 or Table A.1, BS EN 1991-1-7
   [Usually 2a or 2b]
2. Define Service Category – Table B.1, BS EN 1090-2

   [Usually SC1]
3. Define Production Category – Table B.2, BS EN 1090-2
   [either PC1 or PC2]
4. Derive Execution Class – Table B.3, BS EN 1090-2
   [will typically result in EXC2]



Whilst each building needs to be considered on its own merits, EXC2 will be appropriate for the majority of buildings constructed in the UK.

If the Execution Class is not specified on a project, Clause 4.1.2 of BS EN 1090-2 states that EXC2 shall apply.

Client and/or main contractor's responsibility

For all fabricated structural steelwork delivered to site from 1 July 2014, there is a legal requirement under the CPR that it is CE Marked. In order to achieve this, the client or main contractor should appoint a steelwork contractor with an Execution Class equal to that required for the project, as determined by BS EN 1090-2. It should be noted that steelwork contractors with EXC3 capability can be used for EXC1, 2, & 3; and a steelwork contractor with EXC2 capability can only be used for EXC1 & 2.

The BCSA has made CE Marking compliance a condition of membership of the Association from 1 July 2014, so selection of a BCSA Member company will guarantee that the steelwork contractor will have the necessary accreditation to comply with the CPR requirements. The directories for buildings and bridgeworks on BCSA's website (www.steelconstruction.org) include details of accredited certification levels achieved by each member.

It should be noted that if a non-EU steelwork contractor is used on a project, the CPR puts liability on clients and/or main contractors. In that instance, the party engaging the steelwork contractor would be classed as an importer under the CPR and must comply with 'Obligations of Importers' given in Article 13 of the regulations.

Check compliance with the CPR and CE Marking

In order for a steelwork contractor to demonstrate their right to CE Mark their products, they must provide the following three documents:

1. Factory Production Control Certificate
2. Welding Certificate
3. Declaration of Performance

The client or main contractor engaging the steelwork contractor should carry out due diligence before appointing any steelwork contractor who will be delivering fabricated structural steelwork to site on or after 1 July 2014. Likewise, insurers should complete a similar due diligence process before giving Professional Indemnity insurance to a steelwork contractor who wants to CE Mark their products.

The BCSA has made CE Marking compliance a condition of membership of the Association after this date, simply selecting a BCSA Member will ensure compliance with the regulations. The client, main contractor or insurer would not need to carry out due diligence of the steelwork contractor in this case since it has already been undertaken by the BCSA as part of their membership audit.

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