

Legislation

Welcome to the ANSA Legislation section, much more than just a list of British standards, here we put forward practical advice regarding the legislative topics related to the Roller Door Manufacturing Industry.

1. Introduction

We live in a changing world; the U.K is an active member of the European Community which also includes Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Liechtenstein, Luxemburg, Netherlands, Norway, Portugal, Spain and Sweden. Additionally from the 1st may 2004 new members are Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia and Slovakia.

Trade is now global; we can order purchase and receive goods faster and from a wider range of sources than ever before. The free movement of goods lies at the heart of achieving an open market for business in Europe; however the single market could not have been created without a change in regulatory techniques. In May 1985 European Community Ministers agreed on a “New approach to Technical Harmonisation and Standards”, to fulfil this objective. Prior to the implementation of these “New Approach Directives” many of the European Union (E.U) member states had their own regime for regulating products based upon a national perception of related safety hazards evolved in isolation from other nations, this effectively created a barrier to trade, a product acceptable to some E.U. member states was not acceptable to others.

The E.U. product directives are intended to create a legal structure within which products can be sold in any E.U. member country without having to submit a multitude of national assessment and approval regimes in member states.

As these Directives are intended to overcome trade barriers, a directive has served it's purpose once a product has been sold, thus products must comply at the first point of being “put onto the market” or being “put into service”.

New approach directives therefore provide controls on product design and above all, seek to harmonise product safety requirements across Europe.

The Traditional Legislation (the “Old Approach”?), tended to include precise technical details within the text of the legislative document. While this made assessment against the legislation easy, it has one big drawback; unforeseen developments. A new material or novel product that was not foreseen at the time of writing the legislation might not fit the technical requirements. If it could not comply it would be illegal, even if perfectly safe. In order to legalise the new product, the legislation would need to be updated.

2. New Approach – Harmonised Standards

New Approach Directives list only the **Essential Safety Requirements** in general terms. The precise technical details of conformity are left to the manufacturer to justify. The manufacturer is not without help. For each New Approach Directive, CEN, the European Standards Organisation, is mandated to draw-up a new range of standards to provide supporting technical detail. On completion these standards must be adopted by each Member State and any conflicting National Standards of their own must be removed. In doing so, the standards become harmonised across the E.U.

These harmonised standards provide the manufacturer with one solution for consideration. They are the easiest solution as, in becoming harmonised; they have already been agreed as meeting the requirements of the Directive. The harmonised standards, therefore, carry a presumption of conformity; an authority may question whether the standard has been properly applied; they cannot question the standard itself.

A manufacturer is not obliged to apply a harmonised standard. If a solution, alternative to harmonised standards is used, the manufacturer must demonstrate equivalent safety. This may be difficult to achieve and advice regarding compliance may involve seeking independent expert consultancy preferably from a notified body having UKAS (United Kingdom Accreditation Service) approval.

The UK'S member of C.E.N is the British Standards Institute.

3. British Standards

The role of the British Standards Institute is important to roller door manufacturers

The British Standards Institute (BSI) is the U.K's member of CEN, the European Committee for Standardisation.

BSI was the world's first national standards-making body (NSB) and is number one in the world today.

Independent of government, BSI is globally recognized as an impartial body serving both the private and public sectors. BSI works with manufacturing and service industries, businesses, governments and consumers to facilitate the production of British, European and international standards. As the UK's National

Standards Body (NSB), BSI represents UK interests across all of the European and international standards organizations and through their committees.

BSI British Standards has a close working relationship with the British government, primarily through the Department of Trade and Industry (DTI). The commitments and intentions of both are set out in the Memorandum of Understanding (MoU). The MoU provides a framework for BSI and the government to meet the challenges to the UK's standardization infrastructure. Together the Royal Charter and the MoU outline the BSI's role in the development of standards for public use, the promulgation of standards, the voluntary nature of standards and their relationship with legislation.

What is a standard?

A standard is a published document that contains a technical specification or other precise criteria designed to be used consistently as a rule, guideline, or definition. Standards help to make life simpler and to increase the reliability and the effectiveness of many goods and services we use. They are a summary of best practice and are created by bringing together the experience and expertise of all interested parties – the producers, sellers, buyers, users and regulators of a particular material, product, process or service.

Standards are designed for voluntary use and do not impose any regulations. However, laws and regulations may refer to certain standards and make compliance with them compulsory. For example, the physical characteristics and format of credit cards is set out in standard number **BS EN ISO/IEC 7810:1996**. Adhering to this standard means that the cards can be used worldwide.

Any standard is a collective work. Committees of manufacturers, users, research organizations, government departments and consumers work together to draw up standards that evolve to meet the demands of society and technology. British Standards staff acts as secretaries to these committees and project manage the production of standards. As the world's oldest National Standards Body, BSI has over 100 years' experience of bringing together these often very varied viewpoints and facilitating consensus.

Electro technical standards are harmonized internationally by the International Organization for Standardization (ISO) and the International Electro technical Commission (IEC). The British Electro technical Committee (BEC), working closely with BSI ensures that the views of British industry are represented in Europe and worldwide.

How standards are used

The use of standards is becoming more and more of a prerequisite to worldwide trade. A very large percentage of export is influenced by the European and international standards business. For instance all European Union standards are automatically adopted as British Standards.

Although standards are designed for voluntary use and do not impose any regulations, by law many industry bodies and trade associations require products (e.g. motorcycle helmets) to conform to a British Standard or a European Directive before they can be offered for sale in the UK or EU. This is to ensure that countries and companies can compete on equal terms.

Standards are also used as flexible alternative to regulation. Through the development and adoption of best practice guidelines companies and organizations can make sure they are meeting consumer concerns and keeping up with best practice.

Many of the British Standards regarding the specifications, installation, safety and use of Roller Shutter Doors form the basis of European CEN harmonized standards and there is a legal responsibility for Roller Door Manufacturers to comply with these standards.

The Single Most Important European Directive affecting Roller Door Manufacturers is Machinery Directive 98/37/EC.

CE Marking

Purpose

The Machinery Directive 98/37/EC (formerly 89/392/EEC) is one a series of measures introduced under article 100a of the Treaty of Rome. Article 100a directives all have the primary objective of creating a single European market in goods and services with the objective of providing producers and consumers with the benefits of economies of scale that this offers.

The effect of the directive has been to introduce identical requirements for machinery safety in every country within the [European Economic Area \(EEA\)](#).

Scope

The Directive applies to all machinery and to safety components. A machine is defined as *"an assembly of linked parts or components, at least one of which moves..."* excluding machinery that's only power source is directly applied manual effort.

There are some [exclusions](#) from the Directive - for example [military equipment](#) and machines which are already covered by [other directives](#) (e.g. [lifts](#) and medical equipment). However, there is also a general exclusion from the Machinery Directive for equipment which falls within the scope of the [Low Voltage Directive](#) and which presents hazards which are primarily of an electrical nature.

Second-hand machinery which was first used within the EEA prior to the date of the implementation of the directive (i.e. before 1 January 1995) is excluded from having to comply with the directive itself. However, if that machinery is refurbished or upgraded so that its original specification is changed, it will have to be made to comply with the full requirements of the Directive.

Any machinery which was manufactured before 1 January 1995 must be made to comply with the directive if it subsequently brought into Europe from outside just as would any newer machinery manufactured outside the E.U.

Equipment manufactured for the manufacturer's own use is not excluded from the requirements, but may be subject to slightly lesser obligations with respect to marking and documentation.

Directive history

The original Machinery Directive was numbered 89/392/EEC. The original Directive was modified in 1991 by Directive 91/368/EEC which removed the original exclusions for mobile machines and for machines intended for lifting loads. A further amending Directive, 93/44/EEC, was introduced in 1993 which was intended to bring passenger lifting equipment not already within the scope of the [Lift Safety Directive](#) into the scope of the Machinery Directive. Finally, Directive 93/68/EEC which affected all the CE marking directives by introducing a consistent approach to the requirements marking, documentation and enforcement was introduced.

Since the combination of these different amendments resulted in a complex interrelationship which made it difficult to determine a single comprehensive set of requirements, in 1998 the EC introduced directive 98/37/EC which is a consolidation of the previous directives into one document although it makes no changes whatsoever in the actual requirements. 98/37/EC supersedes and replaces the earlier directives and this is the reference number which should be referred to on declarations and as the citation for the Machinery Safety Directive.

Enforcement

Directive 89/392/EEC has been implemented into United Kingdom law by Statutory Instrument (S.I.) 1992/3073: The Supply of Machinery (Safety) Regulations 1992. The amendments were implemented by S.I. 1994/2063; The

Supply of Machinery (Safety) (Amending) Regulations 1994. No UK legislation was required to implement 98/37/EC since it makes no actual changes in the requirements of the Directive.

The Regulations are enforced in the United Kingdom by the Health and Safety Executive for machinery used in the workplace, and the Trading Standards Service for machinery used at home.

Penalties

In the UK the maximum penalty for the supply of non-compliant machinery is three months imprisonment and/or a £5000 fine. More importantly, the regulations also give the authorities the power to force manufacturers to recall or replace faulty product - potentially a far more onerous penalty.

It should also be remembered that any incident which involves injury or damage will fall within the scope of other legislation, for example the The Health and Safety at Work Act 1974 and The Consumer Protection Act 1987. These laws provide for greatly increased penalties than those available under the Machinery Safety Regulations.

Requirements

Annex I of the Directive gives a comprehensive list of the potential hazards which may arise from the design and operation of machinery, and gives general instructions on what hazards must be avoided. Detailed requirements are laid out in a series of safety [standards](#), many of which are still in the process of development.

Because so many standards are required to cover the full range of machines within the scope of the Directive, the European standards bodies devised a hierarchy which can be applied in every situation. The most basic standards, known as 'Type A' standards set out requirements for the safety of machines only in the most general terms: indeed part 2 of EN292 is essentially a reproduction of annex 1 of the Machinery Directive. 'Type B' standards deal with more specific issues: design of emergency stops (EN418); prevention of unexpected start-up (EN1037); pneumatic systems (EN983) and many others. Finally, 'Type C' standards deal with specific classes of machinery: for example, EN12978;2003 deals with Industrial, Commercial and Garage Doors – Safety Devices for Power Operated Doors and Gates – Requirements and Test Methods. Overall, it is expected that more than 2000 standards will be generated as a direct result of the Machinery Directive, and it will be some years before all of these are completed and harmonized.

The Directive also requires the machines manufacturer to produce a Technical File containing documentary evidence that the machinery complies with the

directive. The form and content of the Technical File is dictated in the Directive, but the Directive also effectively allows a period of grace in which the file can be assembled after it has been requested by the authorities.

Machinery meeting the requirements of the Directive is required to have the [CE symbol](#) clearly affixed to indicate compliance. An item of equipment may only display the CE mark when the equipment satisfies all relevant directives; for instance machines with electrical controls must also comply with the requirements of the [Low Voltage](#) and [EMC](#) Directives.

Where volume production is envisaged, the Directive requires that control measures must be identified to ensure that all of the machines manufactured in the run will conform to the provisions of the Directive.

What exactly is CE marking?

The letters 'CE' on a product are the manufacturer's claim that the product meets the requirements of all relevant European Directives.

CE marking on a product;

- Indicates to governments that the product can be legally sold within the European Union (EU) and the European Free Trade Area (EFTA),
- Ensures the product can move freely throughout the European Single Market,
- Indicates to customers that the product meets designated minimum safety standards and therefore a minimum level of quality,
- Promotes public health and safety,
- Enhances product credibility,
- Leads to improved sales and greater customer satisfaction.

CE marking is mandated by New Approach directives. Many products are covered by these directives, and to be placed on the market in the EU, some must bear CE marking – it's a legal requirement. CE marking is the manufacturer's claim that the product meets the essential requirements of all relevant European Directives.

Implementation

The Machinery Directive came into full force in the U.K. from the 1st January 1995.

For most items of machinery, the manufacturer (or their authorized representative) can [self-certify](#), that is they design their products to meet the requirements of the Directive and sign a Declaration of Conformity. This declaration of conformity needs to be backed up with the Technical File. The Technical File has to be retained for a period of 10 years after the manufacture of the machine (or the last machine of a production run).

For certain especially dangerous items of machinery (known as [Annex IV machines](#)), it is necessary for the justification of the use of the CE mark to be independently verified by a recognized authority. Such recognized bodies are known as 'Approved' or 'Notified' Bodies.

Power Operated Rolling Shutter Doors are not Categorized as Annex IV Machines.

Future developments

On 26 January 2001 the Commission published a proposal for an extensive overhaul of the Directive. The proposals follow an extensive consultation exercise undertaken by the Commission to find ways in which the directive can be improved.

The proposals are mainly concerned with simplification and clarification, although some new equipment not previously covered (pyrotechnic cartridge fixing machine, building site lifts and devices for the lifting of persons with reduced mobility) will be included for the first time. There will be some minor changes to the list of hazards in annex 1 of the directive (for instance, protection against lightning will be included for the first time) and there will also be additions to annex 1 for a number of particular types of machinery.

Annex IV remains substantially unaltered, although a few items have been removed from the requirement for type approval. Additionally, the revised directive proposes that manufacturers with an appropriately accredited quality management system may not require the involvement of a notified body in the production of Annex IV machines.

Perhaps the most welcome change is an extensive section of definitions at the start of the directive.

Overall, the changes will make little difference to most manufacturers of equipment and machines which are already being CE marked but they will assist anyone trying to come to grips with the directive for the first time.

A copy of the proposals can be [downloaded](#) from the Europa Commission web site. The proposed implementation time scale is that member states should

publish legislation implementing the new directive by 30 June 2004 with the legislation coming fully into force by 31 January 2006.

Useful links

The European Commission have a [special section on machinery](#) with a great deal of useful information on their [EUROPA](#) server. This includes the full text of the directive, lists of the current [harmonized standards](#) as well as guidance and interpretative documents and a list of the national [implementing measures](#) in each of the member states of the EU.

For details of draft standards, the [New Approach](#) web site is a good EU-funded resource.

The UK government's Department of Trade and Industry (DTI) publish a number of useful guides on the Directive and these are available for [download](#).

Useful information may also be found on the [Health and Safety Executive](#) web site.

Links to some bodies notified under the directive can be found on our [Notified Bodies](#) page.

Further advice

As with all CE marking directives, the actual requirements for any piece of equipment under the directive are complex and dependent on not only the design but also the type of user, the intended use and sometimes even what is claimed in the instructions or sales literature.

The Machinery Directive 98/37/EC

Annex IV

Types of machinery and safety components for which the procedure referred to in article 8(2)(b) and (c) must be applied.

A. Machinery

1. Circular saws (single or multi-blade) for working with wood and analogous materials or for working with meat and analogous materials.
 - 1.1. Sawing machines with fixed tool during operation, having a fixed bed with manual feed of the work piece or with a demountable power feed.
 - 1.2. Sawing machines with fixed tool during operation, having a manually operated reciprocating saw-bench or carriage.
 - 1.3. Sawing machines with fixed tool during operation, having a built-in mechanical feed device for the work-pieces, with manual loading and/or unloading.
 - 1.4. Sawing machines with movable tool during operation, with a mechanical feed device and manual loading and/or unloading.
2. Hand-fed surface planning machines for woodworking.
3. Thicknesses for one-side dressing with manual loading and/or unloading for woodworking.
4. Band-saws with a fixed or mobile bed and band-saws with a mobile carriage, with manual loading and/or unloading, for working with wood and analogous materials or for working with meat and analogous materials.
5. Combined machines of the types referred to in 1 to 4 and 7 for working with wood and analogous materials.
6. Hand-fed tenoning machines with several tool holders for woodworking.
7. Hand-fed vertical spindle molding machines for working with wood and analogous materials.
8. Portable chainsaws for woodworking.
9. Presses, including press-brakes, for the cold working of metals, with manual loading and/or unloading, whose movable working parts may have a travel exceeding 6 mm and a speed exceeding 30 mm/s.

10. Injection or compression plastics-molding machines with manual loading or unloading.

11. Injection or compression rubber-molding machines with manual loading or unloading.

12. Machinery for underground working of the following types:

- machinery on rails: locomotives and brake-vans,
- hydraulic-powered roof supports,
- Internal combustion engines to be fitted to machinery for underground working.

13. Manually-loaded trucks for the collection of household refuse incorporating a compression mechanism.

14. Guards and detachable transmission shafts with universal joints as described in section 3.4.7.

15. Vehicles servicing lifts.

16. Devices for the lifting of persons involving a risk of falling from a vertical height of more than three meters.

17. Machines for the manufacture of pyrotechnics.

B. Safety components

1. Electro-sensitive devices designed specifically to detect persons in order to ensure their safety (non-material barriers, sensor mats, electromagnetic detectors, etc.).

2. Logic units which ensure the safety functions of bimanual controls.

3. Automatic movable screens to protect the presses referred to in 9, 10 and 11.

4. Roll-over protection structures (ROPS).

5. Falling-object protective structures (FOPS).

The CE marking Process

Step 1: Identify the Directive(s) that are applicable to your product. You can download these directives free of charge from the [European Union website](#)

Step 2: Identify the conformity assessment procedure that must be taken. This could be self-declaration, involve testing, inspection or quality system assessment from a Notified Body or a combination of these. The conformity assessment procedure will differ depending on your product and the Directive in respect of which you will be CE marking. If you are unsure about which procedure to take please [Contact us](#) for advice.

Step 3: Determine the dates by which you must take action. This will be the date that the Directive comes into force. The majority of directives are already in force. In these cases, it is an offence to place a product on the market without CE marking because it indicates a presumption of conformity with all relevant Legislation.

Step 4: Identify if there are any Harmonized European Standards applicable to your product. These are not always mandatory for manufacturers although there is a presumption that conformity to these standards will give conformity with the relevant part of the Directive. Whenever possible or appropriate, manufacturers should follow harmonized standards.

Step 5: Ensure the product complies with all the essential requirements of the Directive(s). Take appropriate measures to comply or identify existing data and test reports.

Step 6: Identify whether independent assessment of your conformity to the Directive, or some aspects of it, is required from a [Notified Body](#). This will be stated in the directive and is dependent upon the product you are CE marking. You must not affix CE marking to your product until all necessary certifications have been obtained from the Notified Body.

Step 7: Maintain Technical Documentation required by the Directive(s). Your technical documentation should support your compliance with the requirements of the Directive. It is essential to retain this documentation.

Step 8: Prepare the Declaration of Conformity and the required supporting evidence. The Declaration of Conformity along with the Technical Documentation should be available to Competent Authorities (EU Members) upon request.

Step 9: Check that no other purely national requirements exist in the countries where the product will be sold. These may include national standards, labeling or packaging requirements.

Step 10: Affix CE marking on your product and/or its packaging and accompanying literature as stated in the directive.

Obtaining CE marking for your product can be an extremely long, complex and confusing process but it need not be overwhelming.

Benefits of CE marking

The EU introduced the CE marking scheme to make trade easier and cheaper between EU countries. It means that a manufacturer claims that their product conforms to the minimum legal requirements for health and safety as laid down in EU directives.

Often customers will look for CE marking on a product as an indication of conformance to lay down minimum standards, and therefore a minimum level of quality that other products may lack.

Machinery Directive FAQ's

To what does the Directive apply?

For the purposes of this Directive, "Machinery", means an assembly of linked parts or components, at least one of which moves. It also covers an assembly of machines which are arranged and controlled so that they function as an integral whole.

The latest amendment to the Regulations introduces Safety Components, placed on the market separately, into their scope. These are defined as components which are placed on the market "to fulfill a safety function when in use and the failure or Malfunctioning of which endangers the safety or health of exposed persons".

Thus, the term Machinery covers any equipment, whether for domestic, commercial or industrial applications, that has parts actuated by a power source other than manual effort. However, there are some exceptions; excluded from the Directive are

certain machines where the risks are wholly covered by other Directives. For example, machinery where the risks are mainly of an electrical origin are covered by the Low Voltage Directive (73/23/EEC). Such machinery is already covered by standards

listed under the Low Voltage Directive in the Official Journals of the European Community, C210, 15 August 1992, C319, 26 November 1993 and C199, 21 July 1994.

How is compliance to be demonstrated?

Compliance is demonstrated by CE marking affixed to the equipment when complete and supported by a Declaration of Conformity signed by the manufacturer or his representative within the Community. CE marking carries a presumption of compliance with the requirements of relevant Directives to permit the goods free passage within the member states of the European Community and former EFTA countries, the so-called European Economic Area (EEA). Implementation of the Machinery Directive and the necessity for affixing the CE marking

From 1 January 1995, machines supplied within the EEA must: 1. Satisfy wide-ranging health and safety requirements for example on construction, moving parts and stability and 2. In some cases be subjected to type examination by an approved body and 3. Carry CE marking the manufacturer/importer will generally have to draw up a file containing technical information relating to the machine and a Declaration of Conformity with the Regulations. These rules also apply to Safety Components they were subject to a later transition period requiring full compliance by 1 January 1997.

What do the Regulations require?

Broadly the Regulations split machinery into two categories:

1. Machinery of a particularly hazardous nature which is listed in the Directive at Annex IV. These are equipment such as circular saws, chainsaws, hand-fed woodworking machinery, injection and compression moulding machines, cold metal presses etc and certain safety components. These products must be submitted to an approved body which will undertake full testing, or, where transposed harmonized European Standards exist, verify from the technical file that they have been correctly applied. Then the manufacturer or importer must make a Declaration of Conformity and affix CE marking. A copy of the technical file must be held by the approved body.

2. All other machines must also conform with either the essential health and safety requirements listed in Annex 1 of the Directive but the manufacturer or importer may complete the assessment of conformity himself. He must then draw up a technical construction file, a Declaration of Conformity and affix CE marking.

Further requirements for the affixing of CE marking:

CE Marking indicates that the manufacturer or importer claims compliance with the relevant requirements of all directives within the scope of which the product falls (with certain allowances for transition periods). For example, CE marking on an electronically controlled and electrically powered machine would indicate compliance with the Machinery Directive (from 1 January 1995), the EMC

Directive (from 1 January 1996) and the Low Voltage Directive (from 1 January 1997). The technical file should show which Directives have been invoked.

What is the status of the Machinery Safety Standards?

Compliance with European harmonised standards is one way of meeting the essential health and safety requirements of the Machinery Directive. The European Committee for Standardization (CEN) is working to produce a complex of European Standards at three levels in support of the Machinery Directive. The first (A) level comprises general principles for the design of All types of machinery (e.g. EN 292 Mechanical Design and EN 60204 Electrical Design). The second (B) level covers specific Safety devices and ergonomic aspects of ranges of machinery types (e.g. EN 418 Emergency Stop Equipment). Finally, the Third (C) level covers specific classes of machinery by calling up the appropriate standards from the first two levels and Addressing requirements specific to class (e.g. EN 60204-31 Sewing Machines). Most of the Level A and B standards have been published but some 600 technical committees and working groups are working to produce the Level C standards with Priority given to Annex IV categories of machinery. It will be several years before all these Level C standards are published. Meanwhile conformity with the essential requirements of the regulations can be demonstrated by using Level A and B standards and calling up criteria from the most appropriate generic product standard.

We have been told that CE compliance monitoring for the door manufacturing industry is tightening. Is this so and how many door compliance officers are there active in the U.K?

There are no CE marking officials with the sole responsibility of enforcing CE compliance within the Roller Door Manufacturing industry in the U.K, and the responsibility for enforcement of regulations in the United Kingdom rests with the Health and Safety Executive for machinery used in the work place and the Trading Standards Service for machinery used at home.

The enforcement authorities have available to the various powers under the Health and Safety at Work Acts 1974 and the Consumer Protection Act 1987, for example suspension, prohibition and prosecution.

The authorities are responsible for all machinery which includes power operated Roller Shutters and therefore the current situation remains essentially the same as before the introduction of new approach directives.

- Where machinery bearing the CE marking is safe but there are breaches of other obligations, the 'responsible person' will be given the opportunity to correct the breach before further enforcement action is taken.
- The machinery Directive, as amended, requires Member States to inform the European Commission of any specific enforcement action taken. The

Commission will consider whether the action is justified and advise the parties concerned accordingly.

Penalties; the maximum penalty for contravening the prohibition on supply of non-compliant machinery and safety components is imprisonment for up to three months or a fine of up to £5,000 or both. The penalty for other contraventions of the Regulations is a fine up to the same amounts.

- It is for the courts to decide the penalty in any given case, taking into account the severity of the offence.
- The Regulations provide a defense of due diligence. They also provide for proceedings to be taken against a person other than the principal offender, if it is the other person's fault, and against officers of a company or other body corporate.