Comparing Design Codes

Is the SEMA National Code still valid?

Yes, customers can order storage equipment designed to the SEMA code. Indeed the long standing and well respected SEMA Design Code has recently been remodeled and updated.

When will the FEM Code or CEN Code take over?

As the FEM Code has been superseded by EN 15512, it is difficult to justify designing to the FEM Code.

With strong Manufacturers National Codes, such as the SEMA Code in the UK, there is no planned program to withdraw the Code and it is envisaged that the SEMA Code will remain in use for a number of years.

How do you compare design codes?

The only real way is to perform the calculations in the codes to individual designs.

What are the main differences between the SEMA Code, the SEMA/FEM Code and the EN 15512 Code?

As noted earlier, the European Codes tend to be more complex in their approach and EN 15512 requires the use of comprehensive computer software.

Quality Assurance

What does FEM compliant mean?

A supplier stating that their product is FEM-compliant or EN 15512 compliant implies that it conforms to the European Racking Design Codes. However, this claim may not be backed up by independent verification.

How can customers be assured of compliance and quality?

SEMA has operated a Quality Scheme (QAS 2000) for a number of years. This was originally set up in conjunction with the BSI and offers end users the benefit of quality assurance when they purchase from SEMA Members.

Who checks the design calculations?

QAS 2000 includes an independent third party technical file assessment for all types of storage equipment, including products designed to the SEMA Code or the EN 15512 Code.

Is there a European Policing System?

No. It is up to National Bodies such as SEMA to police design checks. SEMA has, therefore, included a design check to various codes and standards into its QAS regime.

What is FEM?

FEM stands for European Federation of Materials Handling and is organised into Product Groups. The European Racking Federation (ERF), (originally FEM Section 10), is the Racking and Shelving Product Group, of which SEMA is the UK Member.

The Product Groups of FEM are all different and address the needs of their own industries and sectors. SEMA actively participates in the work of ERF, which focuses on the standards and technical development of the European Storage Industry.

Your choice

SEMA hopes the information in this brochure is helpful. It is intended to provide a summary of European Standard development work to date and to enable a better understanding of the current situation. Here are a few summary points for quick reference:

- There are a number of emerging European storage standards. Care should be taken as to which one you are referring.
- SEMA actively participates in and influences European Code development for the benefit of the industry.
- It is acceptable to buy or sell storage equipment in the UK designed to either the SEMA Code or EN 15512.
- The FEM Code has been superseded by EN 15512, no updating or improvement has been carried out for over a decade and any errors in the code will not be addressed. It is generally accepted that this code is now significantly out of date.
- There is no set date as to when EN 15512 will become mandatory, if at all.
- It is up to customers and suppliers to discuss the requirements for a particular project with their supplier in order to determine which code to use.
- The SEMA Quality Scheme encompasses the SEMA Code and / or EN 15512 and, therefore, offers quality assurance and compliance benefits to all customers.
- In summary, please liaise closely with your SEMA member supplier who will be happy to advise and guide you through all stages from design through to safe end use.

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National and European Standards in Storage Equipment

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Storage Equipment Manufacturers' Association

Introduction

SEMA is synonymous with high standards and quality in storage equipment. The SEMA brand is respected and admired not just in the UK but the world over, which is a tribute to the unstinting dedication of its Members over many years in the development of storage equipment standards, Codes of Practice and industry guidelines.

For at least 30 of those years, SEMA has been a leading player in the development of the relevant emerging European standards. The purpose of this brochure is to clarify the current situation and provide guidance on some of the questions that are raised by end users and industry participants.

SEMA Code

Why have a SEMA Design Code?

SEMA design codes have been in use for over 30 years and have a long history of providing racking with a suitable standard of safety. Most warehouses in the UK will have at least some of their racking designed to this standard. Operators are familiar with SEMA Codes of Practice ensuring quality of design, manufacture, installation and finally usage, which includes inspection and repair.

Is the SEMA Design Code covered by a Quality Assurance Scheme?

SEMA Manufacturers are required to submit their Technical Files, which will include test results, for review by an independent expert under the SEMA QAS 2000 quality Scheme. Manufacture and Installation Quality are also covered under this scheme.

Is the SEMA Design Code up to date?

Yes, the SEMA Design Code was substantially reviewed in 2008 and takes account of new design procedures. Other revisions have been introduced since as part of a regular review process.

Are SEMA Manufacturers certified to the new SEMA Code?

SEMA manufacturers are committed to the new revision of the standard, and to deliver quality, safety and reliability from design and on through the supply chain.

How is quality, safety and reliability progressed from design through to end use?

In addition to safe design effected via industry codes of practice and design assessments, the SEMA organisation comprises a number of key initiatives across the storage industry supply chain. These include: SEIRS (the Storage Equipment Installers Registration Scheme), SAIC (SEMA Approved Installation Companies), SDC (SEMA Distributor Companies) and SAI (SEMA Approved Inspectors) all playing their part in the quality, safety and reliability promise. Please contact SEMA for more information on these initiatives.

FEM Code

What is the FEM Code?

There is really no such thing as the FEM Code since there are several codes of practice emerging from FEM at present. The FEM 10.2.02 document, the Design of Static Steel Pallet Racking, is often referred to as the FEM Code.

SEMA administers the FEM Codes in the UK and therefore the FEM Code is sometimes known as the SEMA/FEM Code.

Why have an FEM Code?

European Codes are being developed by many industries to try to remove trade barriers throughout Europe.

What is SEMAs contribution to the FEM Code?

The FEM 10.2.02 Code was built around the stronger European National codes, and SEMA was a leading member of the expert team who produced this document. The main external professionals who advised on the Code were Prof JM Davies, of The University of Manchester and Dr MHR Godley, of Oxford Brooks University.

Is the FEM Code complete?

The FEM 10.2.02 Code is complete and was officially made available in 2000. However, the Code has been superseded by EN 15512 and, therefore, any errors in the code will not be addressed.

What does compliance with the FEM actually mean?

Unfortunately, there are also a number of other FEM Codes that are used and it is not unknown for suppliers to claim compliance with the FEM Code when actually they are referring to other FEM Codes and not to the FEM 10.2.02 Design Code. Moreover, there is no QA system within FEM for any type of storage equipment.

So can product be designed to the FEM code?

No significant updating or improvement of the FEM 10.2.02 Code has been carried out since its introduction and it is generally accepted that the FEM Code is significantly out of date and has been superseded by BS EN 15512.

CEN Code

What is a CEN standard?

CEN stands for European Committee for Standardization and is the official EU organisation responsible for creating and maintaining European Standards.

Why have a CEN Code?

The objective of the CEN Code as to pick up where FEM left off, ie to attempt to remove barriers of trade throughout Europe.

What's involved in creating a CEN Standard?

The EN 15512 Design Code was developed under CEN using the FEM 10.2.02 Design Code as the initial base document.

Mirror groups are formed in each country to look after the industry's national interests at European level. In the case of the UK this involves SEMA working within the auspices of BSI, to ensure that the drafting process is in accordance with European storage industry requirements.

When was the design code issued?

EN 15512 was first published in 2009 and is now approaching the five year review / revision, which is a requirement of all European Standards.

Are there any issues with the use of the EN Standard?

The Code is complex and there are several issues with items such as the testing requirements. ERF / FEM have recently reviewed the testing methods and the interpretation of these tests. This has resulted in a document which will be recommended to the review committee for EN 15512.

Is the EN 15512 standard mandatory?

No, European Standards are only mandatory if mandated by the European Commission in support of an EU directive.

Is the EN 15512 Code the same in each country?

As a European code, this is obviously the objective. However, it is known that to achieve national regulation approval, National Application Documents (NADs) have been published by some countries, resulting in different requirements in different countries.

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sema SEMA is the UK National Committee Member of the Storage Product Group of FEM

MEMBER of FEM