CONTENTS.

The Review covers the period July 2014 to June 2015

Introduction ...................................................... 3
Commercial and Contractual ............................. 4
Process and Technical ...................................... 8
Sustainability .................................................... 12
Health and Safety ............................................. 14
Human Resource and Training ......................... 18
Marketing and Communications ....................... 22
Membership ...................................................... 26
RQSC Bridgeworks ........................................... 32
Steel Construction Certification Scheme ............ 34
Consumption of Constructional Steelwork .......... 38

BCSA Limited is the national organisation for the steel construction industry: its Member companies undertake the design, fabrication and erection of steelwork for all forms of construction in building and civil engineering. Associate Members are those principal companies involved in the direct supply to all or some Members of components, materials or products. Corporate Members are clients, professional offices, educational establishments etc which support the development of national specifications, quality, fabrication and erection techniques, overall industry efficiency and good practice.

The principal objectives of the Association are to promote the use of structural steelwork; to assist specifiers and clients; to ensure that the capabilities and activities of the industry are widely understood and to provide members with professional services in technical, commercial, contractual, certification and health and safety matters. The Association’s aim is to influence the trading environment in which member companies have to operate in order to improve their profitability.
INTRODUCTION.

With the construction industry now in recovery, major new projects in the pipeline and structural steelwork prices firming, it is time for us to look to the future. For the first time in seven years we saw an increase in structural steel consumption in the UK in 2014 – up 5.8% to 818,000 tonnes. However, we must work together effectively to ensure our industry continues to move forward.

In many of the sectors in which we work, steel continues to be the material of choice. Steel’s market share of multi-storey non-residential buildings in 2014 was 66.8%, with steel’s share of office and education buildings at 67.3% and 66.2% respectively. For single-storey non-residential buildings, steel’s market share rose to 87.2% in 2014.

One way we can work together is by actively participating in BCSA activities. We are all helped considerably by BCSA, however the Association also relies on members to contribute their expertise and knowledge for the benefit of the industry.

As I attend BCSA meetings as President, the one thing everyone is talking about is the difficulty in recruiting skilled labour. BCSA’s Human Resource & Training Committee launched the CRAFT training programme in 2014 as a way to address skills shortages and ensure that all members, no matter their size, have the opportunity to take on new staff and train them specifically for our industry. BCSA is continuing to expand its training offer to meet members’ needs.

The structural steelwork sector responded actively and successfully to the challenge of CE Marking. With Building Information Modelling (BIM) on the not so distant horizon, the sector is once again responding quickly and comprehensively with assistance from BCSA.

2014/15 is my first year as BCSA President and I now have a deeper understanding of the breadth of activities that BCSA undertakes. Thank you to all our members who provide the support for our Association to thrive, both through your membership and importantly by contributing to committees, groups and key projects. With the end of the Joint Generic Market Development Agreement approaching in October 2015, we are going to have to come together as an integrated supply chain to support an ongoing market development programme which is so vital to maintaining and growing steel’s market share.
COMMERCIAL AND CONTRACTS.

Promoting fair procurement practices and conditions of contract in order to improve members’ commercial position

In 2014/15, BCSA’s Commercial and Contracts function undertook activities in three main areas:

**Provision of General Guidance**
General contractual and legal information was made available to members:
- Memoranda on specific legal and contractual issues were circulated to all members.
- A range of checklists, annotated contractual clauses and model documents was maintained for the general information of members.
- The updated Contractual Handbook, completed last year, is now freely available on the Members’ Area of the BCSA website.
- BCSA regularly organises seminars and workshops for its members on legal and contractual matters, including on the major standard forms of contract. The last series was to introduce the Contractual Handbook and topics for 2015 are currently being considered.
- BCSA was instrumental in achieving the Construction Contracts Act 2013 (Ireland) and continues to await the commencement of the Act: the date has been pushed back but is now expected to be in Autumn 2015. In anticipation of its commencement, BCSA carried out training for its Irish Region and will provide guidance and advice as necessary.

**Provision of Direct Advice to Members**
The Director of Legal and Contractual Affairs gave advice and reviewed contracts and other documents for BCSA members on request. Additionally:
- BCSA provided helplines free at point of use for BCSA members covering employment and other business law, Scottish law and Irish law.
- A range of model documents appears on the Members’ Area of the BCSA website.
- The Commercial and Contracts Committee provided an anonymous forum for discussion of particular issues during the year.
COMMERCIAL AND CONTRACTS.

Promoting fair procurement practices and conditions of contract in order to improve members’ commercial position

Liaison with Government and industry bodies

BCSA continued to represent the views of the steel construction industry to the Westminster and devolved Governments and other industry bodies - in particular, SEC Group, CBI and the Construction Industry Council Liability Panel, and other bodies as appropriate.

Among other issues, in the last year, BCSA campaigned on changes to holiday pay, on the protection of retention monies and on extending the use of Project Bank Accounts. BCSA was also active in responding to Government consultations to ensure that its members’ views were properly represented during the legislative process, particularly on payment issues.

Additionally, with regard to European Legislation, BCSA issued guidance to its members and sought to ensure its members’ views were represented.

FUTURE PROJECTS:

• The range of model documents and annotated contracts for members will continue to be expanded.
Building 4, Queen Mother Square, Poundbury – Snashall Steel Fabrications Co Ltd

Tubes supplied by Cleveland Steel & Tubes at Bloomberg Square, London

Kyanyuki Bridge, Uganda – John Reid & Sons (Strucsteel) Ltd

Warehouse, Lancing – Southern Fabrications (Sussex) Ltd
BCSA’s Process and Technical team achieved the following in 2014/15:

Advice to Members

BCSA provided comprehensive technical advice and support to member companies, clients, specifiers, designers and contractors. This ongoing service included:

• Response to specific technical enquiries.
• Member visits to advise on fabrication and welding systems.
• Advice on CE Marking.
• Advice on Building Information Modelling.

BCSA steelwork contractor members also receive complimentary membership of the Steel Construction Institute (SCI) as part of their BCSA membership package.

CE Marking and the Construction Products Regulation

The CE Marking of fabricated steelwork covered by BS EN 1090-1 came into force on 1 July 2014. The support, advice, seminars and publications provided by BCSA enabled members to comply with the law and put in place the necessary certified Factory Production Control systems by the 1 July 2014 deadline. CE Marking is now a mandatory requirement of BCSA membership.

In 2014/15 BCSA focussed on providing advice on CE Marking and in particular the scope of EN 1090-1 to BCSA members. BCSA also educated the wider construction industry on CE Marking and lobbied Government to take a stronger approach to the policing of CE Marking.

Building Information Modelling

On 31 May 2011 the Government announced its intention to require ‘collaborative 3D Building Information Modelling (BIM)’ on all of its projects by 2016.

BCSA has reviewed the standards that support BIM including PAS 1192-2: 2013, the Building Information Model (BIM) Protocol and the supporting publications, and has developed a series of examples and supporting information to help BCSA members understand the BIM process, complete the various BIM questionnaires and help define the information that the steelwork contractor is required to provide. This information and guidance has been circulated to BCSA members in a series of structured memoranda and a BIM Guide.

Training of BCSA members has commenced, with a series of seminars on BIM at each of its regional meetings.

Technical Development Programme

BCSA commenced a comprehensive 18-month technical development programme in 2014/15 as part of the Joint Generic Market Development Agreement with Tata Steel. The programme comprises 15 projects that address specific needs aimed at maintaining and developing steel’s market share. Key projects included:

• Investigation studies and reports leading to new design rules for the:
  – Vibration performance of floors
  – Partial interaction in composite beams
  – Appropriate anchorage of parallel decking
  – Tying resistance of end-plate connections to webs and hollow sections
PROCESS AND TECHNICAL.

Assisting members to deliver quality, cost effectiveness and buildability

- Development of new software tools including:
  - Fire resistance of composite beams
  - Frame stability
  - Floor vibration
  - End-plate designer
  - Gusset plate designer

BCSA is also in the process of developing the 6th edition of the National Structural Steelwork Specification which will be aligned with the proposed amendment to the European fabrication standard, EN 1090-2.

www.steelconstruction.info

The www.steelconstruction.info website, which was launched in 2012 is regularly updated with the latest technical information and video and case studies, and continues to be an excellent source of information on steel construction for the wider construction industry.

New articles and content added in 2014/15 included:
- Numerous project case studies.
- Upgraded end-plate designer tool.
- Gusset plate designer tool.
- Article on façade supports and structural movements.
- Video case study of First Direct Arena, Leeds.
- Whole life embodied CO$_2$e emissions data for common framing materials.

Over 70 main articles have been reviewed and updated as part of a formal maintenance programme to ensure that technical information on the website remains up-to-date.

The functionality of the website was enhanced in 2014/15 with the addition of an improved magazine style pdf reader and webinar facility.

The website regularly receives over 175,000 visits each month.

Codes and Standards

BCSA is represented on key BSI, CEN and European technical committees and strives to provide practical advice to shape and influence the development of new codes and standards and the maintenance of existing codes and standards. These standards include:
- National and European design and execution standards.
- Product standards (including bolts and welds).
- Harmonised standards for CE Marking.

Key developments in these standards include:
- Input into the amendments of EN 1090-1, EN 1090-2.
- Input into the systematic review of the Eurocodes.
- The development of a National Annex for EN 1993-1-1 on the selection of Execution Class.

FUTURE PROJECTS:
- A BIM course for BIM managers and a BIM certification scheme for BCSA members.
- Development of the amendments for EN 1090-1, EN 1090-2, EN 1090-4 and the development of the steel design European standards, EN 1993-1-1 and EN 1993-1-8.
- Continued development of the 6th edition of the National Structural Steelwork Specification.
- Ongoing maintenance of www.steelconstruction.info
Yew Tree Dairy, Skelmersdale – Duggan Steel

CIT’s South Bank Tower, London – Severfield (NI) Ltd
BCSA members continued to focus on improving their sustainability credentials in 2014/15.

Sustainable procurement

Sustainable procurement continues to move up the agenda in the construction industry. More clients are demanding that their suppliers and sub-contractors are accredited to the Building Research Establishment’s sustainable procurement standard, BES 6001, Framework Standard for the Responsible Sourcing of Construction Products. Tata Steel has now completed its certification for most of its construction products and achieved a rating of ‘Very Good’.

Carbon

The results of a 2013 study carried out by the Steel Construction Institute on the carbon emissions from steel fabrication were formally published in ‘New Steel Construction’ in February 2015. Including transportation to the steelwork contractor and then onto site, the figure is 0.284 tonnes of CO₂e per tonne of steel. This applies to standard steelwork fabrication. Specialist fabrication requiring intensive work may be higher.

Of this, 0.154 tonnes are a consequence of the activities of the steelwork contractor, but occur from sources not under its control or ownership. Some examples of this are: extraction and production of purchased materials (eg welding rods or paint); transportation of purchased fuels; and use of sold products and services. This means that an average company carbon footprint is 130 kgCO₂e/tonne.

Publications

BCSA and Tata Steel produced two major publications on sustainability related issues in 2014/15.

The first was on thermal mass. Thermal mass is the ability of a building’s structure to absorb excess heat and so reduce the need to provide cooling. The new publication demonstrated that thermal mass can be mobilised in steel framed buildings and provided case studies of where this has been done.

The second publication was on the subject of embodied carbon, an issue which is becoming an important differentiator in material selection. It explained the principles of how embodied carbon emissions are calculated and the case for the method preferred by the steel construction sector.

Both publications can be found in the What’s New section at www.steelconstruction.info

Sustainability Group

The BCSA Sustainability Group continued to meet twice a year. It focused on the opportunities for the steel construction sector created by the increasing emphasis on sustainability in the UK economy. Subjects for discussion included sustainable procurement, standards development, responses to main contractor initiatives and marketing activities.

FUTURE PROJECTS:

• BCSA will take a leadership role in the ethical stewardship of the structural steel supply chain.
• It will also promote the development of the circular economy in which materials are recovered, regenerated and reused at the end of each service life.
6 Wellington Place, Leeds - cellular beams supplied by ASD Westok Ltd
HEALTH AND SAFETY.

Sharing experience and knowledge to ensure good working practices reduce health and safety incidents

Health and Injury

Following on from the successful period of injury reduction in recent years, BCSA members have achieved yet another reduction in the accident frequency rate in 2014. The frequency rate is measured by calculating the number of reportable injuries by one hundred thousand and then dividing by the hours worked. The one hundred thousand represents the working lifetime of a person, so the resulting frequency rate will give an indication of how many reportable injuries a person may experience in their working life. The reduction from 0.4 to 0.3 of injuries that are reported under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) demonstrates that the industry continues to improve.

The drive to reduce injuries in the constructional steelwork industry has been a focus of BCSA members. This is mostly achieved by identifying injury trends and then using members’ combined knowledge and sharing opportunities.

BCSA, HSE and Construction Industry Targets

FUTURE PROJECTS:

BCSA’s Health and Safety Committee will be considering developing guidance on how to manage occupational health issues that are relevant to the constructional steelwork industry. Typical topics could include:

- Hand Arm Vibrations (HAVs).
- Noise.
- Welding Fume.
- Electro Magnetic Field (EMF).

BCSA Accident Frequency Rate

HSE - Revitalising Health & Safety Target

Construction Target
HEALTH AND SAFETY.

Sharing experience and knowledge to ensure good working practices reduce health and safety incidents

Supervisors' Safety Toolkit

To help members reduce the opportunities for accidents to take place in the factory, the BCSA Health and Safety Committee issued a Supervisors' Safety Toolkit. The toolkit enables the supervisor to focus on the unsafe acts and unsafe conditions that occur during the working day, this is often as a result of employees just wanting to progress the work, there is no intention to cause injury. The supervisor is the best person to identify these acts and conditions and then, by following the toolkit, they can address the issues with the employees in a non-threatening way by using well-established coaching techniques.

Health and Safety Forums

BCSA works with other Trade Associations to establish common areas of health and safety concern. The following Forums are actively attended:

- Engineering Construction Industry Association (ECIA).
- Small Business Trade Association Forum (SBTAF).
- Metals Sector Strategy Group (Semta).
- Royal Society for the Prevention of Accidents (RoSPA).
- Institution of Occupational Safety and Health (IOSH).
- Safety Schemes in Procurement (SSIP).
- Reducing Weld Fume Exposure Forum (HSE).

Mobile Elevating Work Platforms (MEWPs)

BCSA continues to be actively involved in the MEWP Safety Forum and has ensured the guidance documents, that are produced by the Health and Safety Executive and UKCG, are not putting its members at a disadvantage.

Steelwork Factory Lifting Operations Guide

BCSA’s Health and Safety Committee has published the ‘Steelwork Lifting Operations Guide’ to help members identify what the good lifting practices are when working with the overhead electric cranes that are used on the many variations of fabricated components. This Guide is intended to establish a standard of lifting practices that can be reviewed if necessary and any changes will be brought to members’ attention.

Ground Conditions Forum

The Health and Safety Executive instigated the Ground Conditions Forum to discuss and address the issues associated with plant operations and the conditions found on construction sites. BCSA attended this forum and continued to emphasise that the roles and responsibilities must be made clear to ensure that action is taken by each party to make certain that the site conditions remain safe to operate plant and equipment. A guidance document was issued in October 2014 and its availability was widely publicised by BCSA.
In 2014/15 BCSA expanded its training services for members and the constructional steelwork industry.

**CRAFT Apprenticeship Scheme**

BCSA launched its industry approved training scheme called CRAFT (Competence Route of Attainment in a Fabrication Trade) in July 2014. The apprenticeship scheme addresses industry training needs identified during a feasibility study carried out in 2013/14. The driver behind the new scheme is the loss of specific training for fabrication and welding in favour of engineering qualifications. As a result, those with these qualifications require further specialist training or they leave the constructional steelwork industry to join other engineering sectors.

The CRAFT scheme provides BCSA members with specific training modules that will develop an apprenticeship into the trade of fabricator, welder or fabricator/welder. The member identifies a suitable person(s) to coach the apprentice in the specific trade activities, and a nominated and registered validator confirms the apprentice is able to demonstrate the ability to complete the tasks safely, in a reasonable time and to the required quality. Since the scheme was launched BCSA members have registered 20 apprentices onto the scheme.

**Bolting Competency Training**

BCSA has an E Learning programme for Bolting Competency; this is the first step for those that need to meet the requirements of the National Highways Sector Scheme 20 Bolting Coordinator role (Bridgework). Following the successful completion of the bolting competency training course and test, those candidates that wish to advance to the Bolting Coordinator will need to provide evidence as described in the BCSA Bolting Standard and train the company specific practitioners and inspectors (based on material provided by the BCSA). Once this evidence is assessed by BCSA a Bolting Coordinator certificate can be issued.

**FUTURE PROJECTS:**

BCSA is considering development of modular training for some of the bespoke tasks that are carried out by members, where no formal recognised training is available. Some of the key occupations within the constructional steelwork industry have no formal training routes or the training is not available due to lack of volume of trainees. The initial courses currently being identified for development are:

- Steel Detailers.
- Structural Steel Erectors.
- Erection Coordinator.
Trailblazer Programme

The Trailblazer Programme is the initiative led by the Department for Business, Innovation & Skills (BIS) which is to coordinate the development of training standards for each apprenticeship by employer groups.

The development of the ‘Welder Standard’ is under way and BCSA is participating. BCSA has offered an employer group to develop the ‘Structural Steelwork Fabricator Standard’, and will submit the draft standard in 2015 for recognition as a formal apprenticeship route to employment.

The new apprenticeships will need to involve external training providers for costs to be allocated and the funding stream identified. The funding will only be for two-thirds of the cost of the apprentice training, with the employer paying one-third of the costs. A minimum level of English, Mathematics and Science qualifications are required for apprentices.

Welding Competency Training

An E Learning course has been developed to enable members to familiarise themselves with the correct terminology used in welding and also an opportunity to learn the basic methods and processes used. The training can be taken over any period of time that is most appropriate to the individual (based on prior experience and knowledge). Following registration additional downloadable training material is made available to help prepare the user for the course. On the successful completion of the end test a Welding Competency certificate is made available.

Metal Decking Installer Training

Following the removal of the access to the Metal Decking Diploma NVQ Level 2 by the ECITB (Engineering Construction Industry Training Board), BCSA has developed an alternative apprenticeship/training scheme. CSCS (Construction Skills Certification Scheme) has agreed to run a trial for one year to see if the BCSA scheme meets the needs of the industry.

Web Portal for Training

BCSA is now using a MOODLE (web portal for learning) to host its E Learning courses and the CRAFT Modules. When validation is complete the MOODLE allows a certificate to be made available to the apprentice/trainee with their name, date and unique certificate number.
MARKETING AND COMMUNICATIONS.

Celebrating the success of structural steelwork and ensuring that it remains the material of choice

BCSA, as part of the Joint Generic Market Development Agreement with Tata Steel, has undertaken significant marketing activities in 2014/15:

**Structural Steel Design Awards**

- The 2014 Awards presentation took place on 8 July 2014 at Madame Tussauds in London.
- The objective of the Structural Steel Design Awards (SSDA) is to recognise and celebrate the excellence of the UK and the Republic of Ireland in the field of steel construction, particularly demonstrating its potential in terms of sustainability, efficiency, cost-effectiveness, aesthetics and innovation.
- Entries for the Structural Steel Design Awards, sponsored by BCSA and Tata Steel, continue to demonstrate increasingly high standards, not only in design and fabrication, but also in speed, quality, health and safety and environmental awareness.
- The independent judging panel visits each of the short listed entries to ensure that the project lives up to the promise shown by the entry on paper.
- The Awards have made a significant contribution to the high market share of steel-framed construction.

**Social Media**

- Social media, including Twitter, Facebook, LinkedIn, Google+ and our own YouTube channel, has been increasingly used to engage with specifiers to further promote www.steelconstruction.info and key issues.

**New Steel Construction magazine**

- New Steel Construction (NSC) continued to be published jointly with Tata Steel in association with the SCI.
- In July/August the new digital-only NSC was trialled with monthly publication and supported by a Weekly News service. The trial has concluded and NSC continues to be published monthly (10 issues a year) in both hard copy and digital versions. The Weekly News was well received and continues to be published.
- Email alerts for each issue were sent to approximately 4,300 named specifiers from across the construction supply chain, and the magazine is also available directly on www.newsteelconstruction.com
- January 2015 also saw the publication of the first NSC Annual Review. This 36-page publication reflects on key projects featured in 2014, highlights the benefits of steel construction and showcases the technical output of the steel sector through the year. 30,000 copies were distributed with Construction News, Building magazine and the Architects Journal.
91-metre Meteorological Mast – Had Fab Ltd

Asda Store, Kent – B D Structures Ltd

Two Glass Wharf, Bristol – Adstone Construction Ltd

Lindapter Hollo-Bolt HCF installed at Exeter Chiefs RU Sandy Park – Lindapter International
MARKETING AND COMMUNICATIONS.

Celebrating the success of structural steelwork and ensuring that it remains the material of choice

Webinars
- A series of webinars were held during the year covering topics including Embodied carbon, Thermal mass, and Fire and steel construction. The recordings have all been converted into online CPDs, and are available on www.steelconstruction.info.

Construction Press
- A number of regular steel construction features are now well established with the leading construction press. These aim to highlight the benefits of structural steel to our specifier target audience. In 2014 we also continued a series of design guides on key topics. A library of these features and guides can be found at http://www.steelconstruction.info/Steel_construction_news
  - Steel Spotlight - a 10-page biannual feature in Construction News, which is read widely by the industry, but particularly popular with contractors
  - Steel Insight - a quarterly feature in Building magazine, written by Gardiner & Theobald, to assist quantity surveyors with up-to-date information and guidance on the realistic pricing of structural steelwork
  - Structural Steelwork in Action - a 10-page biannual supplement in New Civil Engineer, the membership magazine of the Institution of Civil Engineers
  - Steel Intelligence – a 10-page quarterly supplement in RIBA Journal, the official publication of the Royal Institute of British Architects, covering steel construction project case studies and current topics of interest.
  - Steel Solutions – an 8-page biannual supplement in Architecture Today, a monthly magazine produced for the architectural community, covering steel construction project case studies and current topics of interest.
  - Steel Construction: Cost – a 40-page supplement giving an overview of how to price structural steelwork, the key factors to be considered and providing a review of the cost competitiveness of structural steelwork (updated quarterly)
  - Steel Construction: Embodied Carbon – a 32-page overview of how to assess embodied carbon on individual projects, including case studies to demonstrate how well structural steelwork compares with other framing materials
  - SSDA commemorative brochure and SSDA 2014 Special – these reviewed the short listed projects, as well as those that received Awards and Commendations

FUTURE PROJECTS:
- The Structural Steel Design Awards will take place on 1 July 2015 in London.
- Updated Steel Construction – CE Marking guide.
- Steel Construction – Floor Vibrations guide.
MEMBERSHIP.

Demonstrating competence and registering capability, resulting in improved service and client confidence

Membership Services

The Association is a focal point at local, national and international level for the steel construction industry, acting as its representative body and central management services organisation. On behalf of its members, BCSA:

- Promotes the interests of the industry and the use of steel in construction.
- Provides members with professional advice.
- Provides members with opportunities to meet and discuss matters of common interest.
- Promotes the capabilities and expertise of the industry to specifiers.
- Helps specifiers and clients achieve cost-effective solutions through technical excellence.
- Organises seminars and courses.
- Publishes technical publications.
- Represents members’ interests to government, local government, public bodies and professional institutions.

BCSA members have access to a wide range of services and benefits, both professional and economic, which are focused on helping the company, including a professional Head Office advisory service on a variety of topics. A comprehensive briefing and information package is issued to members electronically on an almost daily basis to keep them fully informed on current matters.

There are three categories of membership:

**Member** companies undertake the design, fabrication and erection of all forms of construction in building and civil engineering.

**Associate** members are those principal companies involved in the direct supply to all or some Members of components, materials or products.

**Corporate** members are clients, professional offices, educational establishments etc which support the development of the national specifications, health and safety, quality, fabrication and erection techniques, overall industry efficiency and good practice.

Selecting a Steelwork Contractor

To select a steelwork contractor for tender lists there is no easier way of prequalifying companies than using the BCSA Membership Directories for Buildings and Bridgeworks, which can be found on www.steelconstruction.org
The Directories should be used to select a steelwork contractor who has the special skills to suit your project. BCSA’s experienced professional assessors visit all companies to assess their capabilities in 14 Categories of building steelwork and 8 Subcategories of bridge construction.

The Categories give guidance on what type of steelwork the company is competent to undertake, which relates to the company’s work facilities, its track record and its technical and management experience.

The Buildings Categories attainable refer to the type of steelwork for which a company can be assessed. Each applicant is independently assessed during a visit by reference to a range of competence criteria including technical and managerial. Companies can attain just one category, for one type of steelwork, or two or more.
MEMBERSHIP.

Demonstrating competence and registering capability, resulting in improved service and client confidence

Buildings Categories:

- **C** Heavy industrial platework for plant structures, bunkers, hoppers, silos etc
- **D** High rise buildings (offices etc over 15 storeys)
- **E** Large span portals (over 30m)
- **F** Medium/small span portals (up to 30m) and low rise buildings (up to 4 storeys)
- **G** Medium rise buildings (from 5 to 15 storeys)
- **H** Large span trusswork (over 20m)
- **J** Tubular steelwork where tubular construction forms a major part of the structure
- **K** Towers and masts
- **L** Architectural steelwork for staircases, balconies, canopies etc
- **M** Frames for machinery, supports for plant and conveyors
- **N** Large grandstands and stadia (over 5000 persons)
- **Q** Specialist fabrication services (eg bending, cellular/castellated beams, plate girders)
- **R** Refurbishment
- **S** Lighter fabrications including fire escapes, ladders and catwalks

The Directories also classify companies by suggesting a maximum contract value that they should handle. The Class gives guidance on the size of steelwork contract which the company has the financial and management resources to undertake.

There are over 90 member companies of the BCSA, and this provides users with plenty of choice to ensure a competitive tender list. Membership of BCSA is open to any steelwork contractor who has a fabrication facility within the United Kingdom or the Republic of Ireland.

Community Stand, Watford Football Club –
light gauge galvanized steel zed purlins and side rails supplied by voestalpine Metsec Plc

Kaltenbach Drilling and Coping System

Rhyl New School – EvadX Ltd

Harvey Hadden Sports Complex, Nottingham – Shipley Structures Ltd
MEMBERSHIP.

Demonstrating competence and registering capability, resulting in improved service and client confidence

Selecting a Product Supplier

Associate Members are those principal companies involved in the direct supply to all or some Members of components, materials or products. Sub-categories of associate membership are as follows:

- Computer software
- Design services
- Manufacturing equipment
- Protective systems
- Safety systems
- Steel producers
- Steel stockholders
- Structural components
- Structural fasteners

Details of companies in each sub-category can be found at: www.steelconstruction.org.directories/products-services.html

SSIP Safety Schemes in Procurement (SSIP)

From April 2015, SSIP adopted what was known as ‘CDM CORE criteria’ into their terms of reference, meaning that there will continue to be a common baseline requirement when assessing a company’s organisational capability – SSIP CORE Criteria. The introduction of these competence criteria provided an opportunity for existing health and safety prequalification schemes to build on and formalise mutual recognition already in operation amongst some schemes. SSIP is approved by the Government and the Health and Safety Executive. SSIP members have undertaken to mutually recognise each other’s schemes.

BCSA’s membership assessment process ensures all steelwork contractor members undergo an assessment that reviews the company’s technical, financial and health and safety resources based on the competence and training in the ACoP of the CDM Regulations, and hence mutual recognition is given to BCSA Members.
The Register of Qualified Steelwork Contractors Scheme for Bridgeworks (RQSC) is open to any Steelwork Contractor who has a fabrication facility within the European Union.

In order to be registered for Bridgeworks, a company must present references for completed supply and erect contracts that include at least three bridgework contracts (or contracts of similar complexity), of which two must each exceed £100,000 contract value completed within the last three years.

The company must have manufactured in-house at least 75% of the steelwork for each of the three contracts. The contracts must have required materials and workmanship to recognised bridgework Standards. At least one of the contracts must generally have required thick plate welding such as the butt welding of S355J2 plate in a thickness of at least 40 mm.

The company’s track record and the company’s systems, existing facilities and employed personnel will be used to establish its capability.

Companies can attain just one category, for one type of bridge steelwork, or two or more.

**Bridgeworks Categories:**
- FG  Footbridges and sign gantries
- PG  Bridges made principally from plate girders
- TW  Bridges made principally from trusswork
- BA  Bridges with stiffened complex platework (eg in decks, box girders or arch boxes)
- CM  Cable-supported bridges (eg cable-stayed or suspension) and other major structures (eg 100 metre span)
- MB  Moving bridges
- RF  Bridge refurbishment
- AS  Ancillary structures in steel associated with bridges, footbridges or sign gantries (eg grillages, purpose-made temporary works)

Highways England Company Ltd, Transport Scotland and Northern Ireland’s Department for Regional Development require that companies seeking to tender for contracts involving the fabrication and erection of bridgeworks should be listed on the Register of Qualified Steelwork Contractors for the type and value of work to be undertaken.
STEEL CONSTRUCTION CERTIFICATION SCHEME.

Ensuring Commitment to Quality

Certification Services – 2014

- Demand for SCCS certification services continues to grow.
- All Quality Management (QMS), Environmental Management (EMS) and Occupational Health & Safety Management (OHSMS) certification re-assessments and surveillance visits scheduled for 2014 were successfully completed.
- In addition, the initial and ongoing assessments for new QMS, EMS, OHSMS, Factory Production Control (FPC) and National Highways Sector Schemes (NHSS) clients were completed during the year.

UKAS Accreditation

- SCCS maintained its accreditation for the Scheme’s QMS, EMS, OHSMS, NHSS 19A, NHSS 20 and NHSS 3 certification systems to BS EN ISO/IEC 17021.
- SCCS also maintained Notified Body status for the purposes of CE Marking of Structural Steelwork in accordance with BS EN 1090-1.

Quality Management (QMS)

- In 2014, SCCS serviced the certification of 126 (138 at Q1 2015) separate quality management systems, each of which is visited at least once per year.
- The requirement for structural steelwork contracting organisations to address the requirements for CE Marking (BS EN 1090-1), and in particular Factory Production Control (FPC), continues to attract additional interest in the development of formal quality management systems.

Environmental Management (EMS)

- SCCS serviced the certification of 24 separate environmental management systems in 2014 (26 at Q1 2015).
- This is an area that should not be overlooked by companies as there are legal obligations to maintain, and a well operated EMS will provide the tools to keep on top of these requirements.
- This is another growth area, with several clients going through the initial certification process at the time of publication.
New Stand, Cheltenham Racecourse – Hambleton Steel Ltd

Atrium Roof being installed at Holgate Academy, Hucknall – BW Industries Ltd

Beam Sawing Machine by Voortman

Saint Marks Primary School, Hamilton – Multideck 146 supplied by Kingspan Ltd
Health & Safety (OHSMS)

- In 2014, SCCS serviced the certification of 17 (18 at Q1 2015) separate health and safety management systems.
- This is another area in which steelwork contractors have considerable legal obligations, and a well operated OHSMS will also give companies the tools to keep on top of requirements.

CE Marking – ‘structural steel & associated products’

- In 2014, SCCS serviced the certification of 343 (386 at Q1 2015) Factory Production Control systems.
- SCCS also continued to perform FPC gap analyses during 2014.
- There has been a significant increase in demand for FPC certification into 2015, this follows the unprecedented growth in 2014 during the run-up to the 1 July deadline.

NHSS 19A –
‘corrosion protection of ferrous materials by industrial coatings’

- SCCS serviced the certification of 5 separate corrosion protection management systems in accordance with NHSS 19A in 2014 (6 at Q1 2015).
- This is also a growth area with several clients showing interest and going through the initial certification process at the time of publication.

NHSS 20 –
‘the execution of steelwork in transportation infrastructure assets’

- In 2014, SCCS serviced the certification of 10 management systems for this sector scheme (12 at Q1 2015).
- It is anticipated that interest will grow over time, and it is already a requirement for companies working on Highways England Company Ltd’s contracts.

NHSS 3 –
‘stocking and distribution activities for mechanical fasteners’

- SCCS serviced the certification of 1 management system for this sector scheme in 2014 (1 at Q1 2015).
CONSUMPTION OF CONSTRUCTIONAL STEELWORK.

Steel’s Share of the UK Multi-Storey Non-Residential Market

% Based on Floor Area

- Steel
- Insitu Concrete
- Precast Concrete
- Load Bearing Masonry
- Timber
## UK Consumption of Constructional Steelwork

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial</td>
<td>572</td>
<td>622</td>
<td>617</td>
<td>561</td>
<td>394</td>
<td>335</td>
<td>332</td>
<td>330</td>
<td>350</td>
<td>378</td>
<td>422</td>
<td>438</td>
<td>452</td>
<td>465</td>
</tr>
<tr>
<td>Offices</td>
<td>160</td>
<td>177</td>
<td>216</td>
<td>212</td>
<td>142</td>
<td>99</td>
<td>96</td>
<td>90</td>
<td>88</td>
<td>87</td>
<td>96</td>
<td>106</td>
<td>116</td>
<td>121</td>
</tr>
<tr>
<td>Retail</td>
<td>123</td>
<td>127</td>
<td>135</td>
<td>126</td>
<td>36</td>
<td>31</td>
<td>29</td>
<td>24</td>
<td>20</td>
<td>21</td>
<td>21</td>
<td>21</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>Leisure</td>
<td>84</td>
<td>86</td>
<td>89</td>
<td>94</td>
<td>54</td>
<td>50</td>
<td>48</td>
<td>36</td>
<td>31</td>
<td>37</td>
<td>42</td>
<td>41</td>
<td>41</td>
<td>42</td>
</tr>
<tr>
<td>Health</td>
<td>30</td>
<td>27</td>
<td>31</td>
<td>34</td>
<td>59</td>
<td>51</td>
<td>44</td>
<td>32</td>
<td>31</td>
<td>30</td>
<td>31</td>
<td>32</td>
<td>33</td>
<td>34</td>
</tr>
<tr>
<td>Education</td>
<td>76</td>
<td>85</td>
<td>81</td>
<td>85</td>
<td>140</td>
<td>137</td>
<td>135</td>
<td>104</td>
<td>87</td>
<td>95</td>
<td>102</td>
<td>107</td>
<td>110</td>
<td>113</td>
</tr>
<tr>
<td>Power</td>
<td>24</td>
<td>27</td>
<td>31</td>
<td>34</td>
<td>31</td>
<td>34</td>
<td>37</td>
<td>43</td>
<td>51</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bridges</td>
<td>28</td>
<td>25</td>
<td>30</td>
<td>37</td>
<td>25</td>
<td>42</td>
<td>19</td>
<td>21</td>
<td>23</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Infrastructure</td>
<td>31</td>
<td>29</td>
<td>25</td>
<td>24</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>27</td>
<td>28</td>
<td>29</td>
<td>29</td>
<td>29</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td>Domestic</td>
<td>50</td>
<td>48</td>
<td>44</td>
<td>34</td>
<td>20</td>
<td>16</td>
<td>12</td>
<td>10</td>
<td>8</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Agriculture</td>
<td>47</td>
<td>47</td>
<td>49</td>
<td>53</td>
<td>49</td>
<td>45</td>
<td>39</td>
<td>36</td>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>30</td>
<td>31</td>
<td>35</td>
<td>31</td>
<td>21</td>
<td>14</td>
<td>12</td>
<td>11</td>
<td>10</td>
<td>9</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>Fabricated Imports</td>
<td>19</td>
<td>19</td>
<td>20</td>
<td>21</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total UK Consumption</td>
<td>1274</td>
<td>1350</td>
<td>1403</td>
<td>1342</td>
<td>1014</td>
<td>895</td>
<td>847</td>
<td>778</td>
<td>773</td>
<td>818</td>
<td>895</td>
<td>918</td>
<td>949</td>
<td>972</td>
</tr>
<tr>
<td>Yr-on-yr % Change</td>
<td>1.0%</td>
<td>6.0%</td>
<td>3.9%</td>
<td>-4.3%</td>
<td>-24.5%</td>
<td>-11.7%</td>
<td>-5.4%</td>
<td>-8.1%</td>
<td>-0.6%</td>
<td>5.8%</td>
<td>9.4%</td>
<td>2.6%</td>
<td>3.3%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Fabricated Exports</td>
<td>96</td>
<td>93</td>
<td>94</td>
<td>100</td>
<td>95</td>
<td>100</td>
<td>95</td>
<td>93</td>
<td>90</td>
<td>90</td>
<td>90</td>
<td>90</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>Total UK Production</td>
<td>1351</td>
<td>1424</td>
<td>1477</td>
<td>1421</td>
<td>1093</td>
<td>979</td>
<td>926</td>
<td>854</td>
<td>845</td>
<td>889</td>
<td>965</td>
<td>988</td>
<td>1019</td>
<td>1042</td>
</tr>
</tbody>
</table>

Figures in thousand tonnes
Figures supplied by Tata Steel and BCSA