

Resource & Capability Profile



Design Capability, Management and Innovation

Billington Structures Limited is a structural steelwork fabricator with a well-founded reputation for flexibility and reliability in the construction industry. Our in house design team, utilising the latest software and 3D modelling packages, provide optimum solutions to structural engineering problems blending over fifty years of experience with current fabrication technology.

Our current design systems and software include: -

- FASTRAK - Portal Frame / Moment Connection Design
- FASTSOLVE / FASTSTEEL – Electronic Analysis Programmes
- TEDDS – Structural Engineering packages
- FASTRAK – Multi Storey / (Including Composite Beam & stand-alone)
- CIDJOINT – Lattice Joint Design
- COLD ROLLED Design Assistance
- CELLULAR BEAM DESIGN
- SLIMFLOOR DESIGN

A unique blend of experience and technology allows Billington to manufacture a first class product, satisfying both the contractor and end user alike. Our expertise is relied upon by some of the most stringent blue chip clients in the UK and we have no doubt that the project in question will be as demanding as any of our previous projects.

Training

Training programmes for 2005/6 guaranteed the opportunity for all staff to participate in their personal choice of software training. Billington are an approved RICS Training Provider.

Health and Safety training for site teams continues at a pace. 100% of employees held CSCS cards by the end of December 2003, well in excess of the MCG CCNSG requirements.

CRM Training has also progressed throughout the company from the Main Board of Directors and onto the site.

Our basic training philosophy is that we are willing to train any member of staff who is willing to participate and advance their career. As an example, Steve Fareham started with Billington when he left school as an apprentice engineer; he is now the Managing Director and recently completed a 3yr term as President of the BCSA. We believe that staff training is a major factor of the sustainability equation.

Supply Chain Management

Our supply chain management arrangements are extensive and mostly concerned with Electronic Data Interchange (E.D.I.). Through backward integration, our orders for materials can be placed within minutes for optimum levels of performance and delivery, from our network of suppliers throughout the UK. Forward integration with the site is covered by a lotting system, which ensures that only the materials to be erected are delivered to site. The flexible lotting system can be modified to cover the requirements of the client's programme, ensuring that phased or sequenced delivery can be achieved to suit priority deadlines.

Cost Control

Billington's philosophy ensures that costs are maintained due to lack of errors and additional variations otherwise omitted from quotations, due to ambiguous instructions at tender stage. Therefore wherever possible, Billington endeavour to submit a fully compliant bid where all ambiguities have been eliminated at tender stage through discussion and design excellence.

Project Partnering tends to minimise excessive pre-contract evaluations, additional extras, variations and additional costs to contract during the tendering programme, against the sacrifice of the lowest possible price, that may or may not include the full specification. In our experience a partnered project usually proves to be more reliable on maintaining cost plans and although we rarely supply the lowest price first time around, our tender sum is usually found to be more consistent and reliable for the more discerning professionals.

Our cost control is linked to our ability to control the supply chain and provide the same accurate information to our suppliers that we ourselves would endeavour to acquire from our client. Through E.D.I. we are able to update costs and specification within minutes of notification and assess and distribute any possible cost anomalies during tender stages.

Programming

From early design initiatives to on site flexibility our facility, through current software packages and lotting systems enjoy the ability to optimise timescales and scheduling techniques to meet with our clients most stringent programme requirements. The steelwork is designed and detailed in the same order that it is to be erected, minimising unnecessary project elements being delivered to site necessitating double handling and storage space. Our programming packages include:

- E.D.I. Links with our suppliers
- Strucad Modelling and associated software packages
- X-Steel Modelling and associated software packages
- 3D+ Steel Modelling and associated software packages
- Go-Data Scheduling Packages
- Lotting and sequencing packages
- Microsoft Project Manager and Microsoft Project Suites
- Site to Technical Departments through Laptop Communications

Quality Control

Quality has always been an integral part of our philosophy, we were one of the first in the industry to achieve ISO9001 as our certificate number 0002, achieved in 1989 will testify.

We were also one of the first companies to be accepted onto the register of Qualified Steelwork Contractors and as an Investor in People, recognise that the quality of our service is the result of a highly trained and motivated workforce.

A right first time philosophy is driven through the company by our quality control techniques and our suppliers and subcontractors are all involved in the commitment to reduce defects and incorrect procedures.

Benchmarking, Quality Control and K P I

The provision of Billington's benchmarking and standardisation procedures on bolts, paint, plate thickness and general fabrication techniques allow us to accelerate programme and reduce costs whilst maintaining Quality, Value and Client Satisfaction.

We have approximately 200 suppliers, all with whom we trade regularly. Performance of suppliers is measured through questionnaires, facility visits and wherever commercially possible, partnering arrangements are encouraged to utilise regular 'user group' meetings in order to progress the relationship with continuous development and improvement.

Continuous improvements are worked upon, with an internal 'Non Conformance Reporting' system highlighting problem areas. NCR's are reviewed regularly with copies being sent to suppliers.

We are also operating Post Contract Audits, where the full professional team and the Main Contractor / Project Managers are interviewed and Billington's performance is scored and appraised. Through the PCA we are able to highlight areas needing attention and further improve the service to our client.

Billington and Value Engineering and Management

Value engineering incorporates the ability of the Billington team to maximise the potential of raw materials and resources and minimise any wastage or double handling. Billington employ a number of systems and techniques to ensure that all manufactured items are produced with maximum quality and minimal resources with little or no wastage.

Value Management follows on and is part of Value Engineering. Whilst value engineering is the control of best value through the Design Engineering and Manufacturing stages, value management ensures that the value engineering is being managed by the project team to avoid losing any value accrued on the pre-steel ground works, or cladding and M & E packages that follow. In short, that Value is not lost from one construction package to another through lack of project management and communication at the interfaces between trades.

Examples of Billington's Value Engineering and Management

The simplification of connections by increasing the section sizes of structural beams to remove the necessity for hundreds of man hours to be spent welding stiffener plates into lighter section materials. This usually makes no difference to any other trades on the project but saves considerable time and expense for the client and Billington.

The increasing of section sizes so as to negate the need for fire protection coatings to the steelwork. The coatings usually have to be site applied at varying heights and positions requiring a considerable scale of equipment and man hours to complete the task whereas, by increasing the size of the section the requirement for fire protection to the steelwork can be eliminated.

Standardising on plate thickness in the workshop so as to avoid loading and unloading different thickness plates into the plasma plate machine. A "One size fits all" system, cuts out man-hours used for moving different thickness of plate around the workshop.

Pre-site checking systems to ensure that all ground works comply with Billington's foundation bolt layouts. A post steel system to ensure that the cladding package has exactly the right layout of secondary structural members to which the cladding will be fitted.

Innovation

Billington pride themselves on their ability to innovate, instrumental in the development of most structural modelling software and a sounding board for industry protagonists, Billington endeavour to ensure that the client and his team will receive the very latest in structural engineering techniques.

Billington's recent innovations - The STAR one minute risk assessment secured Building Magazine's Specialist Contractor Awards - Health and Safety Initiative and our easi-edge system was runner up in the Innovation Award. We wondered if it was possible to improve upon such achievement but we have also been involved in the **METIS Project**, developing and standardising e-commerce for the steel industry with our trade body the BCSA. Billington are a user Group leader for 3D+, developing 3D links to design and detailing software. We are also involved in developing Strucad's 3D walk-through viewer, add this to the continuing development of our award winning innovations and Billington are surely at the forefront and deeply involved in the Structural Steel Industry's Technological, Manufacturing and Safety progress.

Health and Safety

Health and Safety is an integral part of all Billington's management procedures and our system is now ISO18001 accredited and we have recently been approved as a CHAS registered company. The inclusion of Health and Safety with the Quality Assurance Management Procedures ensures and allows an active participation in the planning and management of safety on site.

The primary responsibility for the health and safety of the company lies with Management at all levels. Their responsibilities are set out in our Health & Safety Policy.

Responsibilities for Health & Safety on specific projects are set out in our Method Statements. Safe working practices are respected and upheld by developing accurate and detailed risk assessments prior to formulating Method Statements, which are completed by either a Contracts Manager or Site Manager before any project commences. The resulting document is signed by our Technical Department. Induction meetings and 'Tool-Box' talks are then held, which are attended by all team members and sub-contractors.

Billington will comply with the general provisions laid down in the Health and Safety at Work Act 1974 and with particular legislation made with regard to the special hazards laid down in the Construction (Design Management) Regulations 1994.

We are Quality Assured to BS EN ISO 9001, and our Quality Manual is available for inspection at any time.

Our Site Managers, Contracts Managers and Operations Director are all responsible for the day-to-day control and monitoring of Health & Safety on site.

All Site Managers, Contracts Managers and our Operations Director are fully trained in accordance with Lloyds British, The CITB CSCS and C.D.M Regulations. This training is passed down to all site operatives through Induction Meetings, 'Tool-Box' talks and regular meetings, which are attended by all team members.

All employees receive safety instructions to enable them to perform their duties in a safe and efficient manner. Safety instruction forms an integral part of normal job training. New employees are informed, via an induction course, as soon as possible after joining the company of the company's Health, Safety and Welfare Policy, and a policy handbook accompanies the letter of appointment. Additional training is identified through appraisals, and this training is always ongoing.

Billington Structures and the MCG Health and Safety Charter

Qualification Statement in response to the Main Contractors Group (MCG) Health & Safety Charter.

The overall reaction is to support the targeted improvements established within the Charter. As a result of a meeting between the British Constructional Steelwork Association (BCSA) and the MCG on the 9 November 2001, the following points were agreed:

- BSL mobile plant operator / steel erectors have undertaken a course of health and safety awareness as part of the CITB Certificate of Training Achievement (CTA) certification scheme and will hold a CTA Card issued by the CITB.
- BSL non-plant operator steel erectors with no cross training will hold a Construction Clients National Safety Group [CCNSG] health and safety passport and the relevant CSCS Card for their areas of work.
- BSL non-plant operator steel erectors with no cross training working on **engineering construction sites** (i.e. oil refineries) will be entered on the Engineering Construction Industry Skills Database [ECISDB] and hold a CCNSG health and safety passport and a relevant CSCS Card.
- BSL non-plant operator steel erectors with no cross training working on **non-engineering construction sites** do not yet have a skills recognition scheme. However, they will hold a CCNSG health and safety passport recognised by MCG and a CSCS Card when available

Sub-contractors/Suppliers

Sub-contractors are assessed through appraisal forms and visits if necessary, and all relevant certificates for Quality and recognised standards of workmanship are insisted. Whenever possible Sub-contractors, whose previous safety performance is known, are employed. During the compilation of a tender, Sub-contractors are asked to comment upon the safety aspects of their activities in light of the pre-tender Health & Safety plan as compiled by the Contracts Manager. The quality of their response is then used to assess their level of safety awareness.

Prior to the placing of any Sub-contractor a 'Check-list' meeting is held with the prospective Sub-contractor and the following criteria are established and undertakings by the Sub-contractor ensured: -

- Provision of his safety policy.
- Documentation and registers showing personnel employed and their current CITB - CSCS registrations.
- Provision of the safety policies of any of his Sub-contractors.
- To allow his employees to attend site safety seminar/induction courses or the like arranged by Billington Structures and/or the Client without charge.
- Identify hazardous materials (compliance with COSHH Regulations 1999) and list substances.
- Provision of written risk assessments.
- Provision of safety related method statements for all site operations.
- Provision of safe working environment particularly the continuous clearance of debris and equipment from all site areas.
- An understanding of and compliance with PPE Regulations 1992.
- Provision of certificates of worthiness for all plant and equipment.
- Provision of certificates of training achievement for each operator of plant and equipment.
- An awareness of the need to comply with "Fire prevention of construction sites" published by the BEC Loss Prevention Council and the National Contractors Group.
- Statements regarding the Controlled Waste Regulations 1992 regarding handling storage, and disposal of waste, toxicity of waste and the holding of licenses.

In addition to the foregoing the Sub-contractor must name a Director with the responsibility for safety related matters. It is also policy that Sub-contractors are encouraged to participate in the management of safety and are required to attend meetings of the site safety management team when any subcontract activities are to be discussed.

Billington Structures complies with Clients' rules, which require all operatives to be trained, and authorised in writing for any operation they perform.

Wherever commercially possible, partnering arrangements are encouraged with regular 'user group' meetings in order to progress the relationship with continuous development and improvement.

Partnering Knowledge and Expertise

Our current partnering expertise has led Billington Structures Limited to forge electronic links with Suppliers, Consultants, Main Contractors and their professional teams. Repeat business is a common theme in the Billington portfolio where almost 70% of our turnover comes from 9 clients. We are currently manufacturing steelwork for a number of MOD projects throughout the UK with further developments in the pipeline. We are also involved in IKEA Distribution Depots, through our relationships with the professionals and Main Contractors involved where partnering, negotiation and not necessarily competitive tendering are the preferred construction processes. In our experience, partnering will probably never replace traditional competitive tendering. However, where quality, value and satisfaction are required, with the project on time and to budget, including a clean non-adversarial project lifecycle, then partnering is the only way forward.

Sustainability

Since our environmental certification ISO14001 (the first in the Industry) Billington have continued with a policy of minimising waste, maximisation of resources and the empowerment of our personnel to achieve their career goals. In May 2006 we were successfully audited by the Steel Construction Sustainability Charter and achieved Gold Standard for the management systems we have in place.

We employ local personnel wherever possible, ensuring the continued development of the local economy and surrounding territories. High quality training and development is a major facet of Billington's recruitment policy. Our works employees are recruited from leaving school and given excellent access to apprenticeship training. We give the opportunity for these trainees to develop their career professionally, nearly all of our drawing office personnel have advanced their careers from the fabrication facility through qualification and training and the desire to empower themselves. Graduates are recruited into the personnel portfolio for design and technical positions and post-graduate training is positively encouraged to achieve Chartered status in a number of professional roles.

We order materials in exact lengths and recycle all forms of steel waste from drilling, punching, cutting and burning operations. All other materials are recycled where possible. We are informed that the raw steel we purchase contains a high element of scrap metal at least 25 to 30% has been recycled. Billington design, supply and erect their steelwork to create an absolute minimal impact on surrounding cultures and ecosystems.

Billington operate a good neighbour policy whereby our neighbours and local residents are invited to express an opinion on our future development plans, working hours, noise levels and general operational procedures. Visitors to Billington often express their disbelief at the facility's ability to merge into the surrounding landscape and local habitation. In fact a major complaint from our visitors is "We drove straight past, we never saw the facility".

As far as sustainability is concerned Billington will continue to provide a hub of specialist enterprise for the local community and commerce. Ensuring that a highly trained and motivated workforce will deliver the growth and excellence we require to compete successfully in a busy construction market place without damage or hindrance to the local environment and ecosystems around our plants and onto our construction sites around the country. The legacy we leave behind will be of paramount consideration for those who follow us.

Construction Strategy

Our strategy for supply chain partnerships would include:

- The continuous development of the structural element through our technological progress, experience and expertise, to satisfy all project criteria and offer any innovations that will aid and abet the success of the project for all partners of the supply chain.
- To standardise elements of the structure wherever possible in order to reduce waste and costs and improve programme and cost certainty.
- To provide efficient linkages to all partners and supply optimum, up to the minute information, for the benefit of the supply chain management.
- The provision of Billington's benchmarking and standardisation procedures on bolts, paint, plate thickness and general fabrication techniques to accelerate programme and reduce costs whilst maintaining Quality, Value and Client Satisfaction.
- To utilise our geographical site locations to maximise on programme and delivery.
- To provide early participation in the project preliminaries and long term commitment to the partnering arrangement. To build the same trust and understanding through this project that we have with so many other repeat business clients.

Geographic Coverage and Communication

We are able to undertake projects across the UK. Whenever possible the northern projects are managed from our Head Quarters in Wombwell and the most southerly projects are managed by our Yate facility in Bristol. The geographic coverage of our facilities would lend themselves to optimising performance on delivery and programmes to suit your requirements.

Personnel Resource Breakdown

Personnel Resources	Barnsley	Yate	Combined
Main Board Directors	3	0	3
Associate Directors	4	0	4
Senior Management	5	2	7
Senior Designer	2	0	2
Designers	3	1	4
Estimators	4	0	4
Trainee Estimator	1	0	1
Senior Draughtsman	1	0	1
Project Draughtsman	4	0	4
Draughtsman	11	3	14
Trainee Draughtsmen	2	1	3
Project Managers	5	3	8
Site Managers	6	4	10
Site Workers	6	2	8
Senior QS	1	0	1
QS	3	1	4
IT	1	0	1
Accounts Department	2	0	2
Buying Department	3	0	3
Administration	5	1	6
Reception	1	1	2

Works Manager	1	1	2
Works Admin/Support	3	2	5
Supervisors - works	5	6	11
Plater Welders	38	38	76
Machine Operators	8	15	23
Painters/Shotblaster	6	5	11
Slinger/Loaders	6	3	9
Small Works Department	5	0	5
Others	7	1	8
Apprentices	4	3	7
Easi-edge	0	1	1
		Total	250

Personnel Resource Breakdown - By name

	Barnsley	Yate	<u>Combined</u>
Main Board Directors Steve Fareham – MD - BSc. C.Eng FIStructE Peter Hart – FD - BA ACMA Mike Fewster – OpsD. BSc, MSc,CENG, MICE	3	0	3
Associate Directors Steve Mason – Technical Director, FIStructE Mike Rowe – Contracts Director Martin Goddard – Commercial Director Kevin Campbell – Production Director	4	0	4
Senior Management Bob King, Bus. Dev.-Ba(Hons), MCIM,FIInstSMM Brian Turton – Senior Project Manager Darren Kemplay – Human Resources Manager Nick Moore – Commercial Manager David Raynor – Senior Project manager Paul Chubsey – Health & Safety Manager Les Hudson – Business Development (South)	5	2	7
Senior Designer - Mick Reed	2	0	2
Designers	3	1	4
Senior Estimators	2	0	2
Estimators	5	0	5
Chief Draughtsman - Jim Smith	1	0	1
Project Draughtsman	4	0	4
Draughtsman	13	4	17
Project Managers	5	3	8
Site Managers	6	4	10
Site Workers	6	2	8
Senior QS - Richard Parkin	1	0	1
Q.S	3	1	4
IT	1	0	1
Accounts Department	2	0	2
Buying Department	3	0	3
Administration	5	1	6

Reception	1	1	2
Works Manager - Gary Woodward / Roger Hale	1	1	2
Easi-edge	0	1	1
Supervisors – Works	5	6	11
Works Admin/support	3	2	5
Plater Welders	38	38	76
Small Works Department	5	0	5
Machine Operators	8	15	23
Slings/loaders	6	3	9
Painters/Shotblasters	6	5	11
Apprentices	4	3	7
Others	7	1	8
			<u>TOTAL = 250</u>