

# Part 1

## Practice

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## A THE PRACTITIONER

# 1 The Construction Industry

### 1.1 Introduction

The construction industry is concerned with the planning, regulation, design, manufacture, fabrication, erection, construction and maintenance of buildings and other structures. It encompasses the disparate activities of building, civil engineering and heavy engineering. These activities can range from minor domestic works costing a few hundred pounds or major building schemes costing tens of millions of pounds to major transportation and other infrastructure projects costing several billion pounds. Whilst there are certain similarities in the principles underlying the execution of each individual activity or project, their scale, complexity and organisation can differ enormously.

Whilst the demarcation between the aforementioned disparate activities is blurred, the majority of architects are involved solely with building projects in their various forms.

### 1.2 Significance of the construction industry

The construction industry is an important part of any economy. In the United Kingdom it accounts for approximately 7% of the nation's gross domestic product or £110 billion per annum of expenditure. Some 40% of this expenditure is in the public sector, with central Government being the industry's biggest client. However, the construction industry's share of the nation's output has declined over the past 20 years.

There are certain characteristics that distinguish construction from other industries including:

- the physical nature of the 'product'
- the product is normally produced on the client's land (i.e. the construction site)
- most products are a prototype (i.e. a one-off design)
- the traditional arrangement which separates design from construction
- it produces an investment rather than something to be consumed
- its activities may be affected by the vagaries of the weather
- its processes include a complex mix of different materials, skills and trades

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- typically it includes a small number of relatively large construction companies and a very large number of small firms.

The construction industry is a major employer of labour. It employs over 2 million people in the United Kingdom, from the unskilled through to the highly skilled professional. Therefore, due to its significance, the fortunes of the construction industry provide a good barometer of the nation's economic performance. An active construction industry generally represents a buoyant economy.

### 1.3 A changing industry

The construction industry is sensitive to trends in both the national and international economies, and is affected by such matters as:

- economic confidence
- level of employment
- interest rates
- inflation
- manufacturing output generally
- performance in other market sectors, e.g. retail.

In times of recession people or businesses are usually reluctant to invest. This has a direct effect on the construction industry through a reduction in expenditure on capital projects.

The construction industry continually needs to adapt. It has to respond to advances in technology, changes in government policy and initiatives, and new methods of procurement. This has certainly been the case over recent years.

The demand for improvements in performance is constant and cannot be ignored. Key reviews carried out during the 1990s highlighted the dissatisfaction amongst major clients given the unpredictability surrounding the delivery of projects on time, within budget and to the standard of quality expected. The *Latham Report*<sup>1</sup> identified that this was primarily due to the fragmentation within the process (e.g. separation between design and construction) and the level of confrontation between the parties involved. The subsequent Egan report, *Rethinking Construction*,<sup>2</sup> again recognised the level of dissatisfaction and put forward proposals for improving performance across the industry. It centred around five key drivers:

- committed leadership
- customer focus
- integrated processes and teams
- drive for quality
- commitment to people.

It proposed:

- integrated project processes
- decent and safe working conditions

- improved management and supervisory skills
- replacing competitive tendering with long-term relationships
- that leading public sector bodies become best practice clients.

The report set very ambitious targets which included an annual reduction of 10% in terms of construction cost and a reduction in defects of 20%.

Subsequently, in 1999, the government, recognising the need for improvement in the procurement of government construction projects, launched the 'Achieving Excellence in Construction' initiative.<sup>3</sup> It put in place a strategy for sustained improvement in the procurement process and achieving whole-life value for money from projects.

Particular focus was given to the use of partnering and developing long-term relationships, reducing financial and decision-making approval chains and improving the development of individual's skills. The increased use of performance measurement indicators, value and risk management techniques, and whole life costing was also encouraged. Whilst being a public sector initiative, some major private sector clients sought to set similar objectives.

A parallel initiative by *Constructing Excellence* (see section 1.8.4) sought to achieve a step change in construction productivity through continuous improvement. It focused particularly on innovation, productivity and communicating knowledge of best practice. This was encouraged through promoting networking, collaboration, demonstration projects and the benchmarking of performance.

Many of these aims were reflected in a subsequent review by the National Audit Office *Modernising Construction*<sup>4</sup> in 2001. This also highlighted the need to address more effectively, the operational efficiency over the life of a building.

In 2011, the Government published its *Construction Strategy*<sup>5</sup> and made a damning assessment of the industry, similar to that in the Egan report. Listed amongst many criticisms were:

- the United Kingdom does not get full value from public sector construction
- there is broad consensus, spread across the industry and its customers, that construction under-performs
- there are poor and inconsistent procurement practices leading to waste and inefficiency
- there are low levels of standardisation.

Like the Egan report, the *Government Construction Strategy* stated an intention to achieve significant savings from reducing costs by up to 20%. It identifies a model for the public sector in which:

- the client issues a brief which concentrates on the required performance and outcome
- designers and constructors work together to develop an integrated solution that best meets the required outcome
- contractors engage key members of their supply chain in the design process when their contribution can create added value

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- value for money and competition are maintained by effective price benchmarking and cost targeting, by knowing what a project should cost, rather than through lump sum tenders based on inadequate documentation
- supply chains are, where the programme allows, engaged on a serial order basis of sufficient scale and duration to encourage research and innovation around a standardised product
- industry is provided with sufficient visibility of the forward work programme to make informed choices (at its own risk) about where to invest in products, services, technology and skills
- there is an alignment of interest between those who design and construct a facility and those who subsequently occupy and manage it.

The efforts to improve the level of safety within the industry were reinforced by the introduction of the Construction (Design and Management) Regulations 2007 (CDMR). These regulations have undergone a governmental review that was completed in 2011 and the Construction (Design and Management) Regulations came into force on 6th April 2015.

In addition the sustainable agenda has come more to the fore in all projects both large and small. A growing need for a sustainable approach in the planning, design and construction processes exists, together with sustainable supply chains and the need to measure carbon footprints. This has led to a more extensive consideration of the whole life cost for projects in both the public and private sectors, impacting on both the design and procurement processes.

These and other initiatives clearly show there is a willingness for continued improvement in the construction processes (albeit the results have been mixed) which, together with the evermore sophisticated developments in information technology and communications mean that the roles, responsibilities and relationships of all those involved in the industry continue to change. Architects therefore, along with all the others working in the industry, need to keep abreast of all such developments and tailor their approach and services to adapt to the changes.

### 1.4 Clients

A project team comprises the designers and the constructors both working at the behest of a client; the customer and the most important team member. The client commissions a design and contracts for the building works.

Clients appear in many guises. They are the person who engages the consultants (e.g. an architect), they are the “Employer” under many standard forms of building contract (e.g. the SBC) and they generally own the building or facility constructed until such time as they dispose of it. It is the client who pays the fees and the costs to construct the works. In that respect they call the tune, something that should not be forgotten.

Architects, like most other professionals, must have clients in order to practise. Unlike the painter, the author or the poet, they are not at liberty to choose their subject. They may be both client and consultant when, for example, they

design their own house. Otherwise, they are dependent upon commissions from others. This applies whether they are a principal or assistant in private practice, or a salaried officer within national or local government. In the latter case their client would be the council or committee they serve.

Relationships with the client are of prime importance. An architect must not only embark on a process of design (which is something of a personal exercise) but they must also attempt to interpret a client's needs and provide a product that the client wants.

An architect's actions and decisions result in a client spending money. These sums may be substantial. The amount a client ultimately spends may well depend on the skill and efficiency of the architect. Therefore, it is essential that both the client and architect carry each other's confidence. This is particularly so given the architect may have certain responsibilities, during the construction stage under the building contract, to the contractor. It is important the client has confidence that the architect will act professionally and fairly. The old adage, that a good building requires a good client as well as a good architect, is as true today as it ever was.

How does a client choose an architect? It may be in one of several ways. For example:

- the client may approach the Royal Institute of British Architects (RIBA) Client Services and be provided with a list of suitable architects, from which to choose
- the client may search the Chartered Practice area on the RIBA website (see Chapter 9, section 9.1)
- the client may see a building or photograph of a building that they like and research the name of the architect
- the architect may be recommended by a third party
- the architect may specialise in the design of a particular building type which is sought by the client
- it may be as a result of a successful competition for a particular building or project
- it may be from an entry in a directory of architects
- it may be in response, by the architect, to an advertisement in the official journal of the European Union.

## 1.5 Contractors

The contractor, or constructor, is at the hub of a complex construction industry. Contractors are firms which differ greatly in their size and capabilities. Many are small firms whose work may vary from one or two houses and some jobbing work to individual contracts up to perhaps £250,000 in value. However, the bulk by value of most construction work falls to a relatively small number of large firms, often with regional offices, and many carrying out work abroad. Most contractors are limited companies and a number are public companies. Some of the very small contractors could, in theory, operate as partnerships

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(see Chapter 5, section 5.2) though this is now quite rare but there must be tens or hundreds which are sole traders.

Traditionally, the contractor is chosen by competitive tender having priced either a specification and drawings or a bill of quantities and drawings. Alternatively, work may have been negotiated with a preferred contractor. In both instances an architect has been engaged by the client. Today the procurement processes and the contractual arrangements entered into are many and varied. It is not unusual for an architect to offer their services to a contractor, who then is the client (e.g. design and build). The services offered are described in Chapter 3, section 3.6 and the architect's relationship with the contractor regarding procurement procedures, programming and construction is covered in Chapters 16 and 20.

Sub-contractors, as their name suggests, are businesses to whom the contractor sub-lets its work. When work is sub-let it is delegated to another with the contractor remaining liable to the client (or 'employer') for the performance of the sub-contractor (e.g. defects in the sub-contracted works) under the building contract.

In general terms work will be sub-let in one of two ways. First, it may be the specific wish of the architect, employer or other member of the design team that a certain facet of the work is to be carried out by a particular company. This may be for a number of reasons that could include a particular expertise, quality based on past performance or simply price. Some of the standard building contracts include provision for the 'naming' or 'nominating' by the employer (generally it will be required by the architect or other design team member) of a particular company to undertake a part of the overall works. However, there is no standard definition of what amounts to a 'named' or 'nominated' sub-contractor; the terms in each contract have to be examined to understand the procedure for the appointment of the sub-contractor and the extent of any contractual liability, for the performance of the sub-contractor, accepted by the employer. The additional liability accepted by the employer would be in exchange for taking away the contractor's choice. Earlier versions of the SBC (e.g. JCT 98) included what were called nominated sub-contractor provisions; these were detailed provisions which allowed the employer to select a sub-contractor and take on liabilities for the performance of that sub-contractor, e.g. delay. However, these were considered somewhat cumbersome and tended to obscure issues of responsibility. They were omitted from the 2005 edition of the SBC. However, in February 2011 the JCT introduced a 'Named Specialist Update', a supplement for use with the SBC. Incorporation of the supplement allows an architect to name a particular company, to be engaged by the contractor, to undertake a specific aspect of the works. The procedures are much simplified and contractual liabilities falling to the employer, for the named specialist, are limited and less onerous. Albeit, the situation becomes complex if the sub-contractor's employment is terminated or the sub-contract repudiated. There are similar provisions within the IC (clause 3.7) for the selection of what are termed a 'named sub-contractor'. The supporting documentation for use with the IC is more comprehensive (e.g. IC Sub/NAM/E) with no similar documentation produced for use with the 'Named Specialist Update'.



Alternatively, the SBC makes provision for the contractor to select a sub-contractor from a list of not less than three names provided by the architect, or other design team member, whose duties and responsibilities do not extend beyond naming (SBC clause 3.8). The list of names would be shown in the bills of quantities or specification. Once selected from the list the sub-contractor becomes a 'domestic' sub-contractor (see below). Neither the contractor nor chosen sub-contractor enjoy the contractual rights previously enjoyed under the old nomination procedure or for that matter the 'naming' procedures under the aforementioned SBC 'update' or the IC 'naming' procedure.

The choice of sub-contractor to undertake the work could be left to the contractor. Such a sub-contractor is known as a 'domestic' sub-contractor; servant of the contractor or a part of the contractor's 'household'. Under the JCT standard forms an architect has no power to object to any names put forward by the contractor as sub-contractors.<sup>6</sup> Their only power might be, in given circumstances, to object to that particular facet of the works being sub-let on the grounds that it was always expected or required that it would be undertaken by the contractor. The position is different under the Engineering and Construction Contract (ECC) contract where the contractor has to submit to the project manager the names of each proposed sub-contractor for acceptance (clause 26.2).

## 1.6 Consultants

### 1.6.1 Architects

Architects are usually the principal or lead designers on a building project and in many cases the lead consultant. They have the difficult task of translating a client's ideas into an acceptable design and then into working drawings. The profession of an architect is subject to an Act of Parliament<sup>7</sup> and is a registered profession. For business purposes no one can call themselves an architect in the United Kingdom unless they are on the register maintained by the Architects' Registration Board (ARB). The only exceptions named in the Act are 'naval architect', 'landscape architect' and 'golf-course architect'. Only those qualified in accordance with the regulations can be admitted to the register. However, it is only the name "architect" that is protected and anyone can carry out the role as long as the name (i.e. architect) is not used.

The word 'architect' is derived from the Greek '*arch*' meaning 'chief' and the word *teckton* meaning 'carpenter or builder'. Therefore, as the name implies, the architect should be the master builder, the leader of the building team. Architects should be qualified to design and specify the construction of buildings and administer the legal contracts which put that into effect. They must possess both the theoretical and practical knowledge to carry out these roles. Their work is a science as well as an art; they must produce a structure as well as create form; and they must combine aesthetic effect with practical considerations. They are required to visualise the interior, as well as the exterior, of the building. They should ensure that the accommodation is properly related to the requirements

of the owner and occupiers, that the form and construction are appropriate to the function and setting for the building, that they comply with relevant legislation and that the design is developed within the client's budget.

Like playwrights, architects are dependent on other people to interpret their designs. Their involvement during the construction of a building is as important to its success as the directions given by the producer and stage manager for a play. This may often be forgotten or not understood by some architects who leave the contractor to act without proper direction. The list of duties identified by Hudson, in the last edition to be edited by him of *Hudson's Building Contracts* (1926), is still considered relevant today<sup>8</sup> and are set out below.

- '(i) To advise and consult with the employer (not as a lawyer) as to any limitation which may exist as to the use of the land to be built on, either (*inter alia*) by restrictive covenants or by the rights of adjoining owners or the public over the land, or by statutes and by-laws affecting the works to be executed.
- (ii) To examine the site, sub-soil and surroundings.
- (iii) To consult with and advise the employer as to the proposed work.
- (iv) To prepare sketch plans and a specification having regard to all the conditions which exist and to submit them to the employer for approval, with an estimate of the probable cost, if requested.
- (v) To elaborate and, if necessary, modify or amend the sketch plans as he may be instructed and prepare working drawings and a specification or specifications.
- (vi) To consult with and advise the employer as to obtaining tenders, whether by invitation or by advertisement, and as to the necessity or otherwise of employing a quantity surveyor (Engineers do not so often employ a quantity surveyor).
- (vii) To supply the builder with copies of the contract drawings and specification, supply such further drawings and give such instructions as may be necessary, supervise the work, and see that the contractor performs the contract, and advise the employer if he commits any serious breach thereof.
- (viii) To perform his duties to his employer as defined by any contract with his employer or by the contract with the builder, and generally to act as the employer's agent in all matters connected with the work and the contract, except where otherwise prescribed by the contract with the builder, as, for instance, in cases where he has under the contract to act as arbitrator or quasi-arbitrator.'

It should be noted that usually architects inspect, rather than supervise, work; something which the courts have endorsed.<sup>9</sup> It has been established for nearly forty years that the architect never acts as an arbitrator or quasi-arbitrator under any of the JCT standard contracts. The position would be similar under many of the other standard forms, e.g. ECC.

Architects must have a good practical knowledge of building and allied trades, and must have at least a working knowledge of the more specialised aspects of building, such as mechanical and electrical engineering services. Above all they

must be creative and dedicated to solving the client's problems as expressed in the brief.

The various aspects of the role of the architect are explained in some detail in the following chapters.

## 1.6.2 Quantity surveyors/cost managers

The work and services provided by the quantity surveyor might be described as the financial management of the project, whether it is on behalf of the client or the contractor. The term 'quantity surveyor' does not now reflect the services provided, since these have expanded over the previous decades to cover what might be more appropriately termed *project cost management*. However, this has also extended beyond cost management to include procurement and contract advice.

Traditionally, certainly during the early part of the last century, quantity surveyors were employed to prepare bills of quantities for building projects. Their role was constrained to a specific but important part of the building process. This role was quickly extended to include the preparation of valuations for interim certificates and the preparation of a final account.

During the 1960s the quantity surveyor's role expanded to cover design cost planning. This was an attempt to provide the client with some form of value for money and cost-effectiveness (see Chapter 16, section 16.3). In more recent times greater emphasis has been placed on the need to examine construction costs in terms of a building's or project's life cycle rather than solely in terms of the initial build cost.

Today the work of the quantity surveyor can be summarised briefly as follows:

- preliminary cost advice
- cost planning including investment appraisal and whole life costing
- value management or engineering
- risk analysis
- procurement and tendering procedures
- contract documentation
- tender evaluation
- cash flow forecasting, financial reporting and interim valuations
- final accounting and advice on contractual claims and disputes
- cost advice during use/occupation by the client
- contractor insolvency advice
- technical auditing.

It is advantageous for the quantity surveyor to become fully involved from the outset of a project. Although lip service has been paid to this in the past, designers have often completed the early stage of the development process, relying on a limited input from the quantity surveyor. It is during this stage that the type and size of the project are largely determined and these two factors alone contribute to a considerable portion of the total cost. Quantity surveyors can therefore provide a proper and sizeable contribution during the process of strategic planning

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and, by becoming familiar with the particular needs of the client, can properly evaluate, in financial terms, the options that are under consideration.

### 1.6.3 Other consultants

The other members of the design team who may be involved with a project could include any combination of the following:

- structural engineer
- building services engineer
- landscape consultant
- specialist consultants.

#### *Structural engineer*

The function of the structural engineer is to advise on structure, support and design stability. This covers the foundations to the roof and where necessary advice on ground conditions. The structural stability of the building will be their responsibility, which will include advice, specification, design and probably inspection of the works during construction. The findings of any inspection would normally be passed on to the architect, as 'contract administrator', to take, whatever appropriate action, if any, is required under and in accordance with the building contract.

Again they should be appointed early, as their advice will influence the outcome of the final design. In many cases the overall building design cannot be furthered without the basic structural advice and information being available. Some structural engineers will offer drainage and other infrastructure advice, e.g. roads and highways. Alternatively, advice and design input on these matters may be provided by an engineer specialising in this aspect of the work.

#### *Building services engineer*

Mechanical and electrical services can form a significant part of many projects. Building services engineers provide advice, specification and schematic or detailed drawings for the building services. They are sometimes responsible for obtaining tenders from specialist firms (e.g. contractors) for this aspect of the works. Again, they should be an early appointment and have a close involvement to ensure the proper integration of services into the overall design. Failure to achieve effective integration is a frequent cause of delay and disruption during the construction phase leading to disputes, additional costs and at worst litigation.

#### *Landscape consultant*

Landscape consultants are entitled to style themselves 'landscape architects'.<sup>10</sup> Their function is to advise on the external environment from early inception to implementation of the project on site. Early appointment is advisable because the advice will greatly influence the success of a planning application and of the project completion. The services offered range from a strategic analysis of the

wider context, including landscape and visual impact assessments to more site-specific masterplanning, mitigation studies, hard and soft landscape design to detailed landscape design.

### ***Specialist consultants***

On certain projects there is a need for the involvement of other specialist consultants. These can include:

- *acoustic engineers*, e.g. concert venues, theatres and the like or where sound suppression is required
- *theatre consultants*, e.g. all types of theatre work
- *curtain walling engineers*, e.g. special cladding work
- *information technology consultants*, e.g. complex data and communications installations
- *interior or furniture designers*, e.g. special interior designs.

The list of such specialist consultants is not endless but as buildings become ever more complex, more and more such specialists tend to be required. This needs to be considered when preparing fee budgets for a client who will need to be advised of the services required and the benefits they can bring.

### ***CDM co-ordinator***

Under the CDMR, where a project is notifiable, the client needs to appoint a CDM co-ordinator to advise and assist the client with their duties. In particular to co-ordinate health and safety aspects of design work, liaise with the principal contractor and prepare the health and safety file. The Regulations have undergone review and the 2015 Regulations came into force on 6 April 2015.<sup>11</sup>

## **1.7 Clerk of works**

The clerk of works is sometimes employed as an inspector of the works during construction, either directly by the client or through the architect.<sup>12</sup> Clerks of works are responsible for checking that the materials and workmanship conform to the specification outlined in the contract documents. They may be, albeit rarely, authorised to issue instructions to the contractor; under the JCT forms of contract their powers do not extend to the issue of instructions.<sup>13</sup>

While architects are required to undertake adequate inspections to check that a building is erected generally in accordance with the provisions of the contract, their terms of appointment rarely require them to make constant inspections. There is, however, often a need for such constant attention; hence the employment of a clerk of works. An architect when certifying has to act impartially between the client and the contractor. The clerk of works is usually under the direction of the architect and, if the clerk of works is appointed by the architect, the architect is responsible for the clerk of works' actions. However, in most instances, the client appoints the clerk of works and is responsible for the clerk of works' actions.

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The clerks of works' duties and limitations should be clearly understood, and it is the responsibility of the architect to see that they are properly instructed. A good clerk of works can be of great assistance to the architect, who should make a point of getting to know them well and gain their confidence at an early stage. They are usually persons of considerable practical experience, having graduated from a particular trade (e.g. carpenter or electrician), and the architect should listen to their advice on practical matters when the occasion demands.

The primary duty of the clerk of works is, as already mentioned, to ensure that the work is carried out in accordance with the contract drawings and specification. Their authority is therefore limited to ensuring that the standard required under the terms of the contract is maintained. They can identify and condemn any work or materials that fall short of this standard. It may be necessary under the terms of the building contract for the architect to support the clerk of works' decision with an instruction, e.g. SBC clause 3.4.

The clerk of works should be on site during the hours that the contractor's operatives work (unless only employed on a part-time basis) and, furthermore, must endeavour to see all aspects of the works undertaken. It is a difficult job to do well, and requires both tact and knowledge. The architect should recognise this and do all that is possible to support and assist a good clerk of works.

The clerk of works can be of further assistance to the architect by taking, for instance, details including photographs, videos or measurements of any work that is likely to be covered up. This applies particularly to foundations and other parts of the works which might be subject to re-measurement for valuation purposes or to aid in the preparation of the 'as built' records. There is a variety of other records which the clerk of works could keep. For example, daywork sheets may have to be submitted for works to be valued on a daywork basis. It will be necessary to confirm that the time and materials shown on the sheets submitted by the contractor are correct, and the clerk of works could offer valuable support to the architect and/or quantity surveyor on this matter. Records of operatives and plants on site and what they are doing, visitors, weather records and the like could prove invaluable if the architect and/or quantity surveyor have to address a contractor's claim for additional time or costs.

## 1.8 Construction industry bodies

### 1.8.1 Professional organisations

Members of the building team all have their professional organisations that act as learned societies with libraries, research facilities and internet websites for members. In some cases they offer recognised educational and professional qualifications. They oversee the conduct of their members and practice within the profession generally. They also provide a central source for social activities and the general dissemination of information by way of journals, lectures, etc. The principal organisations are:

- *Architects*
  - Royal Institute of British Architects (RIBA) ([www.architecture.com](http://www.architecture.com))
  - Royal Incorporation of Architects in Scotland (RIAS) ([www.rias.org.uk](http://www.rias.org.uk))

Royal Society of Architects in Wales (RSAW) ([www.architecture.com](http://www.architecture.com))

Royal Society of Ulster Architects (RSUA) ([www.rsua.org.uk](http://www.rsua.org.uk))

Royal Institute of the Architects of Ireland (RIAI) ([www.riai.ie](http://www.riai.ie))

Association of Consultant Architects (ACA) ([www.acarchitects.co.uk](http://www.acarchitects.co.uk))

■ *Clerks of works*

The Institute of Clerks of Works and Construction Inspectorate of Great Britain Inc. (ICWCI) ([www.icwgb.org.uk](http://www.icwgb.org.uk))

■ *Building and construction managers*

Chartered Institute of Building (CIOB) ([www.ciob.org.uk](http://www.ciob.org.uk))

■ *Engineers*

Institution of Civil Engineers (ICE) ([www.ice.org.uk](http://www.ice.org.uk))

Chartered Institution of Building Services Engineers (CIBSE) ([www.cibse.org](http://www.cibse.org))

Institution of Electrical Engineers (IEE) ([www.iee.org](http://www.iee.org))

Institution of Mechanical Engineers (IMechE) ([www.imeche.org.uk](http://www.imeche.org.uk))

Institution of Structural Engineers (IStructE) ([www.istructe.org.uk](http://www.istructe.org.uk))

Chartered Association of Building Engineers (CABE) ([www.cbuide.com](http://www.cbuide.com))

■ *Landscape*

Landscape Institute (LI) ([www.landscapeinstitute.org](http://www.landscapeinstitute.org))

■ *Planners*

Royal Town Planning Institute (RTPI) ([www.rtpi.org.uk](http://www.rtpi.org.uk))

■ *Project Managers*

Association for Project Management (APM) ([www.apm.org.uk](http://www.apm.org.uk))

■ *Surveyors*

Royal Institution of Chartered Surveyors (RICS) ([www.rics.org.uk](http://www.rics.org.uk)).

## 1.8.2 Contractor organisations

Contractor organisations also have bodies that look after their members and represent their interests. For example, the *United Kingdom Contractor's Group* whose principal objectives are stated as being to influence policies and legislative changes to the construction sector proposed by the UK government and EU institutions; to encourage contractors to work together, especially in areas of health and safety and environmental issues; to promote change and spread best practice; and to work with other groups to offer a single voice for contractors ([www.ukcg.org.uk](http://www.ukcg.org.uk)).

There is also the *Federation of Master Builders* which protects the interests of small and medium-sized building firms. It is an independent and non-profit-making organisation lobbying for members' interests at local and national level ([www.fmb.org.uk](http://www.fmb.org.uk)).

## 1.8.3 Manufacturers trade associations

There are a number of associations representing suppliers and manufacturers from whom useful information and advice can be obtained on the use of material that their members manufacture, supply or use. Amongst these are:

- Council for Aluminium in Building
- Brick Development Association



- British Constructional Steelwork Association Ltd
- British Precast Concrete Federation Ltd
- British Woodworking Federation
- British Cement Association
- Clay Pipe Development Association Ltd
- Copper Development Association
- The Lead Sheet Association
- Mastic Asphalt Council
- Timber Research and Development Association
- Zinc Information Centre.

In fact, most manufacturers have an organisation to publicise and promote their particular trade and product.

#### 1.8.4 Other organisations

Other organisations exist which further the interests of their members or standards within the industry. A selection of the more important of these are listed and described below.

***Association for Consultancy and Engineering (ACE)***  
***(www.acenet.co.uk)***

This association represents the interests of the consulting and engineering businesses in the UK. It promotes the contribution engineers and consultants make to construction and other industries.

***British Board of Agrément (BBA) (www.bbacerts.co.uk)***

The BBA is the UK's major authority offering approval and inspection services to manufacturers and installers supplying the construction industry. Originally set up in 1966 by the Government, the BBA's certification and inspection services are recognised by building control, local authorities, industry insurers and key trade associations in the construction industry. The Board works in conjunction with the European Organisation for Technical Assessments. The European Organisation for Technical Assessment is based in Brussels (Belgium) and develops and adopts European Assessment Documents which are a harmonised technical specification. The European Assessment Document is developed in cases where a product is not or not fully covered by a harmonised European standard. The European Assessment Document contributes to the safe assessment of construction products, enables manufacturers to comply with European legislation, and facilitates the uptake of innovation, research and technical development.

***British Property Federation (BPF) (www.bpf.org.uk)***

This body represents the interests of the property owning and investment industry. Its objectives are stated as:

- improving legislative, fiscal and regulatory conditions that affect the industry and so enhance the benefits the industry can bring to the United Kingdom



- supporting its members in creating value through access to information, through understanding why and how a policy is made, and through the promotion of best practice
- raising the profile of the property industry with political stakeholders, the media, and the public.

***British Standards Institute (BSI) ([www.bsigroup.co.uk](http://www.bsigroup.co.uk))***

This institute has a scope much wider than that of the construction industry. It is the recognised authority in the United Kingdom for the preparation of national standards covering specifications for dimensions, preferred sizes, quality, performance, methods of testing, terms, definitions and symbols and codes of practice. All publications are listed and available through the BSI website. A large number of standards apply to the construction industry. Committees responsible for framing the standards have representatives from contractors, construction professional bodies (e.g. architects, engineers and surveyors) as well as experts in the manufacture of the material concerned. British standards are widely adopted in the Commonwealth countries. The BSI also has an obligation to publish British versions of European standards (these are referenced BS EN), and to remove any conflict between British and European standards.

***Building Centre ([www.buildingcentre.co.uk](http://www.buildingcentre.co.uk))***

This organisation, which is located at 26 Store Street London WC1E 7BT, is backed and supported by manufacturers of all types of building products. It maintains a permanent exhibition where samples of a wide variety of materials can be seen. It is an agency from which names, addresses and often leaflets published by manufacturers can be obtained. It provides a helpful resource when only the brand name of a material is known.

***Building Cost Information Service (BCIS) ([www.rics.org](http://www.rics.org))***

BCIS is the RICS' building cost information service. It was originally formulated for quantity surveyors, who contributed cost and other information and in return were able to use the database when providing cost advice. Its information is now available through online application, data licensing and publications.

***Building Research Establishment (BRE) ([www.bre.co.uk](http://www.bre.co.uk))***

The BRE's main establishment is at Garston near Watford. Through its companies BRE (BRE is the trading name of Building Research Establishment Limited) and BRE Global Ltd, it offers a wide range of consultancy, testing, certification, commissioned research, sustainability and training services across the built environment and the associated industries. It is responsible for Building Research Establishment Environmental Assessment Methodology (BREEAM). It is engaged in research across a wide spectrum of activities associated with building and often publishes its results, details of which are available through their website.

***The Construction Alliance ([www.theconstructionalliance.org](http://www.theconstructionalliance.org))***

The Construction Alliance is a group of the major construction trade organisations working together within the remit of the Strategic Forum for

Construction. The Alliance represents over 13,500 individual companies and organisations involved in the construction industry. The Alliance membership comes from across the UK and represents constructors throughout the supply chain. Member organisations are the Federation of Master Builders, the National Federation of Builders, the Civil Engineering Contractors Association and the Scottish Building Federation.

***Constructing Excellence (www.constructingexcellence.org.uk)***

A sector and supply chain organisation seeking to drive change within construction to improve performance. The aim is to produce a better built environment. Constructing Excellence seeks to bring value to businesses through two key approaches. The first is the 'Think Tank' where it seeks to strategically set an agenda for industry improvement through the collation of empirical evidence on what does and what does not work. It collects evidence by means of innovation and research, demonstration projects and key performance indicators (KPIs), and benchmarking. The second is delivery where, it tries to influence change in an industry sector by means of networks, guidance and training and, leadership and influence.

***Construction Client's Group (CCG) (constructingexcellence.org.uk/sectorforums/constructionclientsgroup)***

The CCG has evolved from the Construction Clients' Forum, a lobbying group, in the early 1990s to an established body aligned with Constructing Excellence. The Construction Clients' Forum became the Confederation of Construction Clients and in 2004 it became the Construction Clients' Group forming part of the British Property Federation. In 2006, the Construction Clients' Group became a sector forum of Constructing Excellence. The CCG seeks to support both private and public sector customers of construction regardless of their core business activity. It does this by promoting best practice and offering a voice for a wide range of 'blue chip' clients. Its members include the BBC, the Westfield Group, the Environment Agency and a number of local authorities. The CCG sees itself as being at the heart of Constructing Excellence and as the body seeking to secure better value for money for all public and private sector clients.

***Construction Industry Council (CIC) (www.cic.org.uk)***

The Construction Industry Council was established in 1988 with five members. Since then it has grown in size and influence and is now the largest body concerned with all aspects of the built environment. It is the forum for the industry's professional bodies, research organisations and specialist trade associations. It aims to develop effective relationships with members and provide an interface between members and the wider industry including Parliament and Government. Its mission is stated to be:

- to serve society by promoting quality and sustainability in the built environment

- to give leadership to the construction industry, encouraging unity of purpose collaboration, continuous improvement and career development
- to add value and emphasis to the work of members.

***Construction Industry Research and Information Association (CIRIA)***  
([www.ciria.org.uk](http://www.ciria.org.uk))

CIRIA is the construction industry research and information association. It is a neutral, independent, not-for-profit body that seeks to link organisations with common interests. It aims to facilitate a range of collaborative activities that help improve the industry. Its work is said to address industry issues, challenges and opportunities to provide business and delivery improvement. It works across the construction industry to identify best practice, develop new approaches and to identify and enable innovation. It seeks to enable industry groups to share knowledge and exchange ideas through events, reports, meetings and web services.

***Construction Industry Training Board (CITB)*** ([www.citb.co.uk](http://www.citb.co.uk))

The CITB was established under the Industrial Training Act in July 1964. This Act is intended to secure an improvement in the quality and efficiency of industrial training, and to make sure that an adequate supply of properly trained people for all levels within the industry exist. The CITB is funded by raising a levy on contracting firms based on the number of employees. In return it is able to offer grants to employers who undertake their courses. A network of advisors is available to provide advice to employers on how to get the best from their workforce.

***Construction Products Association (CPA)***  
([www.constructionproducts.org.uk](http://www.constructionproducts.org.uk))

CPA acts as a single voice to promote and campaign for the construction product manufacturers and suppliers. It works with key policymakers such as the Department for Business, Innovation and Skills, the Bank of England, the EU, the Confederation of British Industry (CBI), the BSI and other trade and professional organisations to highlight the benefits of investment in the built environment. It nominates representatives on government and other committees, and seeks to promote both home and overseas trade. It provides an annual report and weekly information in addition to other technical literature. It publishes economic forecasts on the construction industry and other technical literature, e.g. sustainability.

***Joint Contracts Tribunal Ltd (JCT)*** ([www.jctltd.co.uk](http://www.jctltd.co.uk))

This organisation is composed of representatives from client, architects, surveyors, contractor and sub-contractor bodies. The constituent bodies are:

- British Property Federation
- Construction Confederation
- Local Government Association
- National Specialist Contractors Council Ltd
- Royal Institute of British Architects

- Royal Institution of Chartered Surveyors
- Scottish Building Contract Committee Ltd.

It is responsible for the drafting of the various JCT forms of building contract and supporting documentation including their periodic revision and the issue of practice notes for clarification purposes. Its work also includes considering questions submitted to and through the representative members on the forms of contract.

***National Specialist Contractors' Council (NSCC) ([www.nsc.org.uk](http://www.nsc.org.uk))***

The National Specialist Contractors' Council brings together the common aims of specialist trade organisations within the construction industry and is the authoritative voice of specialist contractors in the United Kingdom. It represents its members by seeking to influence government policy, promoting the need for fair payment terms, looking to improve quality across the industry, promoting training and education, offering expert and legal advice.

***Specialist Engineering Contractors' (SEC) Group ([www.secgroup.org.uk](http://www.secgroup.org.uk))***

SEC is a group of six trade associations comprising over 60,000 firms and a workforce of more than 300,000. It accounts for a significant part by value of construction output. The six associations are the Plumbing and Heating Contractor's Alliance, British Constructional Steelwork Association, Building and Engineering Services Association, Lift and Escalator Industry Association, SELECT (Electrical Contractors' Association for Scotland) and SNIPEF (Scottish & Northern Ireland Employer's Federations). Being an umbrella organisation, SEC believes it can wield greater power and influence, when lobbying government and government bodies, than the trade associations acting alone. It seeks to ensure that the interests of its members are brought before government and form part of government policy. It looks to influence matters such as the supply chain payment charter, late payment in general, the problem of retentions, project bank accounts and the standardisation of prequalification to the benefit of its members.

***Strategic Forum for Construction ([www.strategicforum.org.uk](http://www.strategicforum.org.uk))***

The Strategic Forum for Construction brings together the main bodies in the construction industry. It acts as the interface between government and the construction sector. Its vision is stated to be for the United Kingdom construction industry to achieve maximum value for all clients, end users and stakeholders and to exceed their expectations through the consistent delivery of high quality products and projects. The members are:

- Clients: who are represented by the Construction Clients Group
- Professionals: who are represented by the Construction Industry Council
- Contractors: who are represented by the Construction Alliance
- Specialist contractors: who are represented by the National Specialist Contractors Council and Specialist Engineering Contractors Group

- Product suppliers: who are represented by the Construction Products Association
- Site workers: who are represented by UCATT on behalf of the unions.

## References and notes

1. Latham M, *Constructing the Team* (1994), HMSO.
2. DETR, *Rethinking Construction: The Report of the Construction Task Force* (1998), Department of the Environment, Transport and the Regions.
3. Achieving Excellence in Construction was launched in March 1999 by the Treasury to improve the performance of government departments, their agencies and other public bodies in their role of clients in the construction industry. It put in place a strategy for a sustained improvement in construction procurement performance and in the value for money achieved on construction projects including maintenance and refurbishment contracts.

The Achieving Excellence initiative set out a strategy with challenging targets for government performance under four headings of (i) management, (ii) measurement, (iii) standardisation and (iv) integration. The key aim was the delivery of best value for money; not necessarily the lowest cost but the best balance of quality and whole life cost.
4. At that time, the Government planned to spend £19 billion on infrastructure works over the following three years and the need for the widespread implementation of good practice in the industry was viewed as key. The National Audit Office produced a report which highlighted the need for change in the procurement and management of new construction, refurbishment, repair and maintenance works.
5. Government Construction Strategy (May 2011), Cabinet Office.
6. SBC clause 3.7.
7. Architects Act 1997 as amended.
8. Furst S and Ramsey V, *Keating on Buildings Contracts* (2012), 9th edition, Sweet & Maxwell, p. 488.
9. *Consarc Design Ltd v. Hutch Investments Ltd* (2002) 84 Con LR 36.
10. See section 20(2) of the Architects Act 1997.
11. The Construction (Design and Management) Regulations 2015 did away with the role of the CDM Co-ordinator and introduced the role of the Principal Designer. Refer to Health and Safety Executive, *Managing Health and Safety in Construction Construction (Design and Management) Regulations 2015 Guidance on Regulations* (2015). The Stationery Office publications.
12. Institute of Clerks of Works, *Clerk of Works and Site Inspector Handbook* (2006), RIBA Publishing.
13. For example, see SBC clause 3.4.