

Society of Façade Engineering



What's in it for me?



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Chairman of the SFE



The Society of Façade Engineering was inaugurated in 2004 as a Society under the Chartered Institution for Building Services Engineers (CIBSE), supported by the Institution of Structural Engineers (IStructE) and the Royal Institute of British Architects, which means the Society has only been in existence for seven years.

It is to say the least a relatively new society which is currently in its infancy.

The SFE is a volunteer based society without, at the moment, any paid staff. It is joined by interested parties on an individual basis; not by companies. It is a society run by its members for its members.

Looking back, the timing of the Society's formation was perhaps not the most well chosen given the economic and construction downturn which began in 2008 (and appears to those of a less than optimistic outlook to still be ongoing). However the reasons for its creation are sound and worthwhile, if you are at the bottom there is only one direction and that is up!

So why was the Society formed?

I suppose it's a bit like asking why the Royal Institute of British Architecture was formed.

Checking through the history books it seems that the RIBA was originally named the Institute of British Architecture in London and was formed in 1834, so it has to be conceded that it is a slightly older institute than the Society of Façade Engineering.

The history books state that it was formed by several prominent architects of the day including Philip Hardwick, who is particularly associated with railway stations in London and elsewhere.

Hardwick is probably best known for London's demolished Euston Arch and its twin station Birmingham Curzon Street which stands today as the oldest railway terminus in the world.

Actually trying to find out exactly why the IBAL was formed and how or why it later changed its name to the Royal Institute of British Architects RIBA (other than they got in the marketing boys who decided that RIBA scanned better than IBAL) isn't really that clear, which is not surprising since it was over 178 years ago.

However if you do a little research into the RIBA you find that one of the stated reasons for its formation was:
"the general advancement of Civil Architecture and for the promoting and facilitating the acquirement of the knowledge of the various arts and sciences connected therewith"

The Society of Façade Engineering doesn't have such a grand or eloquent mission statement it simply tries to encapsulate what facade engineering as a profession is all about, which is: 'Façade engineering is the art of resolving aesthetic, environmental and structural issues to achieve the enclosure of habitable space.'

So we now come back to the question posed above:

Why was the Society of Façade Engineering formed?

The answer really is very simple; it was formed by a group of like minded professional individuals who were already involved in the field of facade engineering, in recognition of the need to "regulate" the industry and introduce a system of accreditation.



According to the SFE website the society was established in order to:

- Act as a qualifying body for competency in the façade engineering profession. This involves assessment of candidates' experience and knowledge in facades and their skills to handle client's façade requirements professionally and competently.
- Protect clients' interests by allowing them to identify competent façade engineers

through the membership grading system.

- Act as a learned body maintaining and raising the technical and professional standards of the façade engineer

I suppose this begs the question; why was there a need to "regulate" the industry and why was it deemed necessary to "bring order" to the world of Façade Engineering?

The simple answer is that we now live in an unregulated world where the the use



of a legally protected name, style or title in connection with a business or a professional practice is frowned upon, if not explicitly banned.

This means that anyone can call themselves a Façade Engineer and set up a façade engineering company. This conversely means that anyone wishing to employ a façade engineer has no idea if the person they are proposing to employ has had the required relevant experience.

It should be recognized at this point that the term relevant experience is a difficult phrase to define. What is the relevant experience that a façade engineer should have?

How can it be proved that the facade engineer does have the relevant experience they say they have? In my experience just reading it on a CV has not always proved to be the most

accurate method of judging someone's past experience in the construction industry!

The world of façades is multifaceted and complex, it covers a very wide range of diverse topics such as: materials, systems, finishes, fabrication techniques, thermal values, shading coefficients, structural loads, computational fluid dynamics, to name but a few.

What proof is there if you employ a façade engineer or facade engineering company that the members of that company have had the relevant experience?

So we have at present a situation where anyone with even the most minimal level of experience in the world of facades can set themselves up as a façade engineer.

A situation which perhaps might sound similar to that time 178 years ago when the Institute of British Architecture in London was set up, possibly for similar reasons, to bring order to an unorganized situation.

Many would argue that this freedom, this flexibility is not a bad thing; it allows new and exciting ideas and concepts to flourish without

any imposed restrictions. It allows the entrepreneurial spirit its head.

In and of its self not such a bad position to be in except this also has to be seen in the world of façades as it stands today and the pivotal role that the envelope plays in the

energy consumption of the building, in the thermal comfort of the buildings occupants, in the weatherproofing of the building amongst a whole host of other issues (of course not forgetting aesthetics which is, or should be, the driving force for any façade).

These are issues which are fundamental to the successful design fabrication installation and long term performance of any facade system.

There is always a need to balance the free thinking unrestrained world against the more mundane but essential performance aspects of façade design.

To aid in this process it would be very helpful to have as part of the design team an experienced knowledgeable facade engineer. Someone who may well have a specialized knowledge of an aspect of the facade design but who also has a general knowledge of all aspects of the facade design, potential materials, performance, fabrication and buildability

So what constitutes a good knowledgeable façade engineer?

To quote from the Society of Façade Engineering web site:

Façade engineers come from a range of backgrounds but most usually architectural, structural or building physics.

In order then to become a façade engineer, they have then developed a wider breadth of cladding skills and a deeper knowledge than they would encounter within their original discipline.

Many façade engineers will be generalist façade engineers. These are able to advise across the full range of materials, systems and performance types.

Specialist façade engineers will typically first have attained a level of knowledge across all façade types and then have chosen to specialise in one particular aspect of façade engineering. Examples are façade engineers whose emphasis is in building envelope physics, using analytical modelling skills; or façade engineers that specialise in a particular cladding material such as stone or glass.

Parallels exist with other professions with generalist and specialist divisions e.g. legal where there are solicitors and barristers, and medicine where there are general practitioners and consultants. It may be difficult for clients at the inception of their project to decide which type of façade engineer they require. A general practice façade engineer is best placed to determine this for the particular circumstances of a client's individual project and advise on façade specialisms that may be needed.

So now we have (I hope) established why the Society has come into being we have to ask what relevance the society has to the world of facades and the facade engineer.

As Chairman of the Society of Façade Engineering one of the main questions I get asked as I promote the SFE at various meetings and seminars is:

“What’s in it for me”?

I suppose this might have been one of the questions asked by those who were asked to join the Institute of British Architecture in London in 1834 and I suspect they would have received the same answer I’m about to give: On an individual and personal level, at this precise moment in time in the early stages of the life of the Society, apart from being able to add SFE to your business card, making contacts,



networking, receiving notification of upcoming SFE events and getting access to the CIBSE knowledge portal (all of which are undeniable benefits), not a world shattering amount.

However if you for a moment think outside your own personal box, if you are accepted into the Society (which is not by any means a foregone conclusion) and in the fullness of time if the acronym SFE becomes the byword for quality facade engineering, then a very great deal.

The society is trying to make a difference, it is trying to bring a level of quality to an unregulated field, it is trying to offer to clients, architects and others a demonstrable mark of quality and approval and the only way it can achieve this is if people of the right level of experience and quality join the society and the membership of the society becomes



recognised as a pre-requisite by those seeking to employ a façade engineer.

To use a rather hackneyed and overused cliché it is at the moment very much a chicken and egg situation.

Mind you I always did enjoy a good omelette!