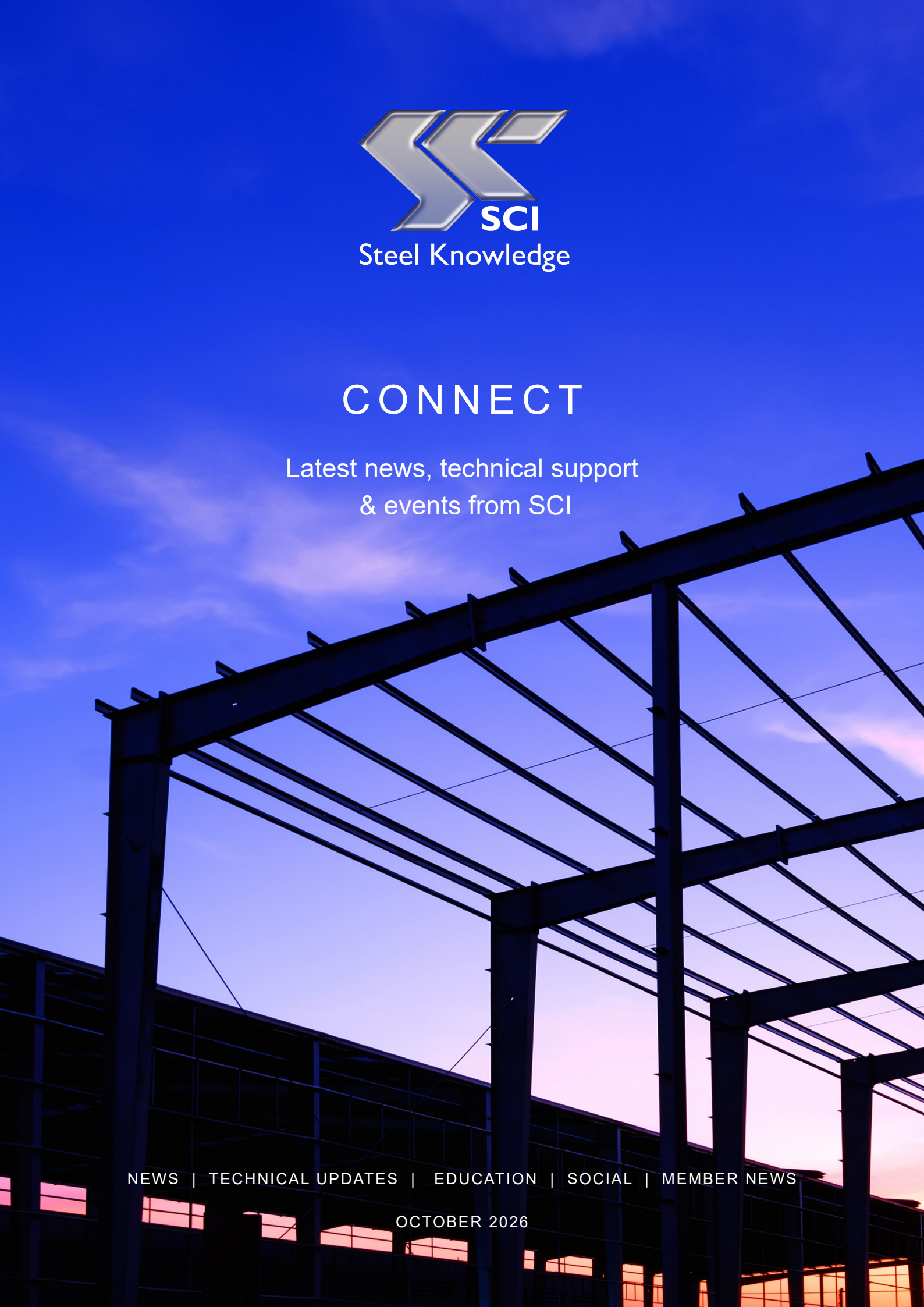
SCI
Steel Knowledge

CONNECT

Latest news, technical support
& events from SCI



NEWS | TECHNICAL UPDATES | EDUCATION | SOCIAL | MEMBER NEWS

OCTOBER 2026

NEWS

A ROUND UP OF THE LATEST INDUSTRY NEWS

SCI NEWS

UK STEEL DESIGN LEADERSHIP

CB/203 is the BSI committee responsible for structural steelwork. It mirrors, and inputs to, the European committee responsible for EN 1993 in all its many parts. I've recently had the honour, with a mixture of pleasure and trepidation, of being elected to become its next Chairman (with effect from January 2027). It will take me back into the world of acronyms - including ENs, NAs, NDPs, TCs, SCs, WGs and IR3 - that I've only played a small part in since giving up the Chairmanship of the Eurocode 4 committee a few years ago.

It's a voluntary role. The BSI team who interviewed me asked why I wanted to do it, to which my responses were: 1) somebody had to, because CB/203 plays a very important role for the steel design community, and 2) it is important that we bring as much practical experience into the arena as possible. You might say the latter is a moot point – I haven't had a 'real job' since a very brief spell at Motts assessing bridges in the mid-1990s and five years with Taylor Woodrow in the late 1980s building and designing nuclear power stations (amongst other things). But the SCI advisory desk shows us the best and perhaps the worst of practice – what designers struggle with, what they get wrong, what they do beyond the ordinary, how different parties fail to appreciate each other. So I know I have something to contribute, and I'm old and thick-skinned enough to not back away from trying.

Key parts of my manifesto are these:

- There is an imminent and very real need to help users come to terms with the Generation 2 Eurocodes, and use them correctly. This needs guidance to help explain and contextualise what are all too often very complex (occasionally bordering on unintelligible) new rules. The supposed benefits of the new codes (ease of use, better harmonisation) have been widely proclaimed, but nobody could deny there are some real potential negatives (more complexity, and more conservative answers despite no experience of failures, to name but two). Whether assisting with correct implementation is seen by BSI as its role (perhaps they think it is down to SCI and our counterparts), I would argue they have a moral responsibility to the UK design community.
- Whilst we are still in the final stages of preparing Generation 2, with National Annexes (that's NA in my list above) being finalised and, perhaps surprisingly, amendments already being sent to national standard bodies for comments, there is also already talk of Generation 3! Suggestions I've seen focus on technical developments, to reflect developments like additive manufacture and AI. My personal input is different – for the next generation I would like all proposed changes to be assessed not only on whether they are 'more correct', but also on how relevant they are to practical designs, and do they make a difference that warrants the extra effort? I recently wrote an article about early amendments for New Steel Construction, noting that some proposed early amendments are almost totally irrelevant for practical designs, so why impose yet more change?
- We need more input from practitioners. End of. But the code development process is not attractive to practitioners because of timescales and chance of success. The process is attractive to academics, not least because identifying a problem puts one in the starting blocks for securing research funding to solve it. I'll say no more on that subject! Accepting we will never get significant practitioner input 'formally' through BSI committees, I hope I will be able to use SCI's network of members and friends to obtain 'informal' input to specific issues as and when needed. I/we are in a unique position to do that.

So wish me luck, help if you can, and if you are really interested (noting there are lots more where these came from!):

EN – Euro Norm (European Standard)

NA – National Annex

NDP – Nationally Determined Parameter

TC – Technical Committee

SC – Sub Committee

WG – Working Group

IR3 – CEN (European version of BSI) internal rules for drafting codes and standards that can result in some rather unhelpful outcomes.

Dr Graham Couchman, CEO, SCI
Connect with Graham on LinkedIn



SCI TECHNICAL EVENT 2027 - SAVE THE DATE

Following on from the success of our sold-out technical event at BRE earlier this year, we are delighted to announce our next event, 'Joint Effort: Designing & Fabricating Steel Connections', taking place on **22 April 2027** at **Imperial College London, UK**.

The event will focus on steel connections and will consist of a variety of technical presentations from industry experts, guided laboratory tours, interactive Q&A sessions and live SCI software demonstrations.

Places are limited for this **FREE*** event, which will include complimentary refreshments and lunch.

Bookings will open for members on 15th December 2026 and for non-members on 12th January 2027.

If you are interested in sponsoring the event, please contact marketing@steel-sci.com.

*Please note, no-shows will be charged £50+VAT.



masterSERIES
TCB TENSION CONTROL BOLTS
IDEA StatiCa® Calculate yesterday's estimates
CASTCONNEX innovative components for inspired designs
lindapter®

REMEMBERING NSC'S LONG-STANDING EDITOR

We were saddened to hear, recently, of the passing of Nick Barrett, who was Editor and Editor-in-Chief of New Steel Construction (NSC). This is a journal SCI has been associated with for many years, meaning several of us knew Nick personally. Acknowledged by his many colleagues (past and present) as a professional and diligent journalist, Nick oversaw NSC's coverage of the UK and Ireland's steel construction sector since 2005.

Born in Glasgow, he attended the city's Caledonian University (formerly known as Glasgow College of Technology) and moved to London in the late 1970s. Nick's journalist journey began on the Westminster Press Graduate Trainee Scheme at the Ealing Gazette. He moved on to writing for, and reporting on, the construction industry, firstly as a staff writer at New Civil Engineer from 1981 to 1985. He subsequently established Barrett Byrd Associates (and later Alignment Media), Kent-based contract publishers and press relations companies specialising in construction, manufacturing and transportation.

We offer our condolences to his wife, daughters and grandchildren.

A fuller obituary featured in NSC Magazine (September edition).

HAVE YOU VISITED OUR YOUTUBE CHANNEL?

It is a valuable resource packed with informative videos, expert insights, practical guidance, and updates from across the industry. Whether you're looking to expand your knowledge, stay informed about the latest developments, or hear directly from our specialists, the channel offers a wealth of free content designed to support and inform.

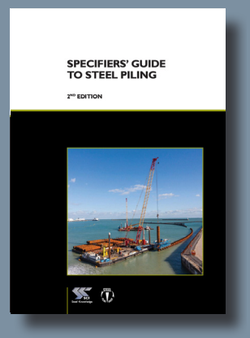
Be sure to subscribe and turn on notifications so you never miss a new video.



PUBLICATIONS

849 SCI publications have been purchased/ downloaded from the SCI Shop so far this year.

The current bestselling publication is:
P308: Specifiers Guide to Steel Piling - 2nd Edition

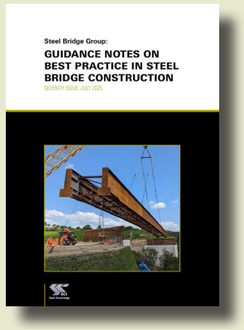


SCI SHOP

STEELBIZ

7,782 resources have been viewed/ downloaded by SCI members so far this year.

The most popular resource currently is:
P185 - Steel Bridge Group. Guidance Notes on best practice in steel bridge construction - Seventh issue



STEELBIZ

365 DAYS OF STEEL (BY BRUNO DURSIN)

Alberto Campo Baeza (born 15 October 1946) is a Spanish architect and former Design Professor at the Escuela Técnica Superior de Arquitectura de Madrid from 1986 to 2017. He has been considered part of the group of designers who introduced Minimalism in architecture, together with architects such as David Chipperfield and John Pawson. Campo Baeza defends the elimination of colour in architecture, as a mean to maximise the expressivity of natural light.

Rotonda House (2021)

Situated at the very summit of a hill north of Madrid, the Rotonda is a house with the sierra as a backdrop in the distance. To capture that 360° panoramic landscape, the architect proposed a belvedere at the top of the house where one feels in seventh heaven. Supporting this belvedere there is a two-storey podium made of Campaspero limestone, in which the required openings for windows are carved out to provide light and ventilation to the rooms.

Multi-Sport Pavilion and Classroom Complex (2017)

The complex near Madrid includes sports halls, multi-purpose rooms, a gymnasium, swimming pool, physiotherapy centre etc. The structure of the pavilion is in steel, with a grid of pillars and beams on the facades and trusses to achieve the great roof span. All steel is painted in white. The remainder of the structure is in reinforced concrete, with the unique feature of wide angled beams over the basement swimming-pool area.

The 365 Days of Steel publication is exclusively available to SCI customers in the UK. You can order your copy by emailing sales@steel-sci.com



TECHNICAL UPDATES

View the latest technical information on steel in buildings and construction, through our own technical information website.

STEELBIZ

FLOORS WITH HEAVY LOADING – WHAT ARE THE IMPLICATIONS?

Introduction

More-and-more clients are requiring their buildings to be designed for heavy imposed floor loads. A recent enquiry aimed at our Advisory Desk concerned a uniformly distributed load (UDL) of 22 kN/m^2! We are also seeing many cases where there are heavy point loads (PL), often numerous and sometimes at close centres. Although in some cases these onerous loads are specified simply because the client wants to keep their options open to avoid delays while the real loads are determined, sometimes it seems the loads are realistic. In this article Dr Graham Couchman considers the implications of high levels of loading, and how they can change expected failure modes and the design rules that should be applied. As usual, his focus is on composite floors, recognising their commercial significance to the UK steel construction sector.

Heavy uniform loading

Many floors are designed for an unfactored UDL of 5 kN/m^2. In terms of what a typical floor will experience that is already pretty high, 2.5 kN/m^2 is recommended by the British Council for Offices, resulting in wasted money and wasted material. But for some types of building even 5 kN/m^2 is not enough, and that means that design rules and failure modes may change from what is normally used and expected. Some examples of things that may change are considered below.

Composite slabs

Design of the vast majority of composite slabs is governed by the ability of the decking to support the wet weight of concrete (and coincident construction stage imposed loads). The weight of concrete usually results from the need for a certain depth in order to satisfy the fire insulation criterion for the finished slab. Propping the decking to help it support the wet concrete is not normally considered because of the detrimental process implications of propping. However, with heavy final stage imposed loading the composite slab design may become more critical than the construction stage decking design, either at normal temperature or for the fire condition. The latter is likely to be particularly critical –decking losing almost all its resistance in fire is why, having ignored any end continuity for normal temperature design, we nevertheless take it into account in fire because the slab needs all the help it can get. Some sagging resistance comes from the very weakened deck, with a good lever arm, plus the more performant upper mesh with a small lever arm. The mesh is more performant because it is at a much lower temperature, being insulted by the concrete, so retains reasonable strength.

Even with the reduced level of loading that is associated with the fire limit state, this combination of sagging and hogging moment resistances may not be enough, particularly under high imposed load. In such cases, and in cases where there is no end continuity therefore no hogging resistance, an obvious solution would be to place reinforcement bars in the decking troughs. These bars provide additional tensile resistance in span, with a good lever arm and relatively good strength as they are insulated by surrounding concrete. It is worth adding that some software may not allow bars and decking to be combined when determining tensile reinforcement and thereby sagging resistance. The so-called 'mesh and deck' method, which has a justification for the deck contribution that is based on tests, does not allow bars to act also.

Composite beams

Many composite beams are designed using the rules given in SCI publication P405 Minimum degree of shear connection rules for UK construction to Eurocode 4 [1], which very significantly reduce the required minimum degree of shear connection compared to BS EN 1994-1-1 [2]. This reduction makes many designs that would not be possible – you simply cannot fit enough shear studs on the beam when you have transverse decking with ribs at a given pitch – very efficient. P405 rules are adopted in most composite beam software used in the UK.

The reason why we have minimum degree of connection rules is to ensure that the combined stiffness of the studs on a beam is enough to prevent the slip at the beam ends, where it is a maximum, exceeding the stud's slip capacity. Slip capacity is typically taken as either 6 mm, for studs in solid slabs, with parallel decking, or transverse re-entrant decking, or 10 mm for transverse trapezoidal decking. This is therefore a strength check used to verify a stiffness requirement, and is not transparent.

The minimum degree of connection rules in P405 differentiate between levels of imposed loading. For normal cases the factored imposed UDL shall not exceed 9 kN/m^2. When loading is not just UDL, as an alternative this limit can be satisfied by limiting the moment due to factored imposed loading to 70% of the moment due to factored total loading. More onerous rules are given to cover factored imposed loading up to 12 kN/m^2, which is defined in P405 as 'heavy loading'.

As an example, for a 16 m span symmetric beam with transverse trapezoidal decking (studs have a slip capacity of 10 mm), in S355 and assuming the beam is fully utilised

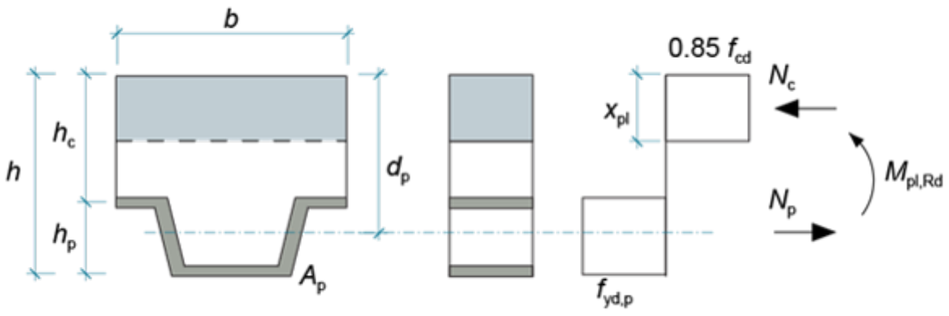


Figure 1: Stress blocks and lever arms for a composite slab cross-section (no bars in troughs so the only tensile reinforcement is the decking). Notation as per BS EN 1994-1-1

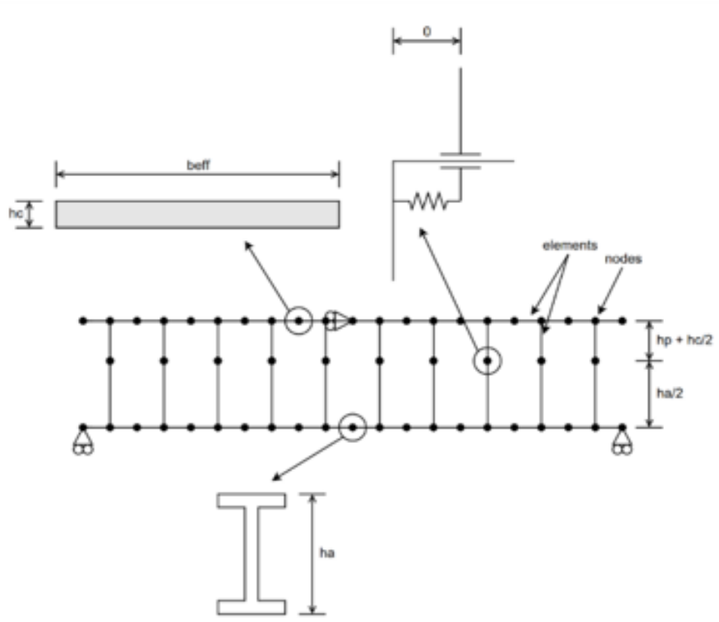


Figure 2: Schematic of ANSYS model of a composite beam (the upper line of nodes and elements represents the slab, the lower level the beam, with springs representing stud behaviour)

in bending, the minimum degree of connection is:

- Normal loading 43%
- Heavy loading 91%

The reason for this differentiation in the level of imposed loading can be understood by considering the background to the rules. Numerical analyses were undertaken by SCI, using ANSYS to model composite beams with springs representing appropriately defined load-slip characteristics for the shear studs – initial stiffness, resistance, slip capacity (Figure 2). For a given beam the number of studs was increased until the end slip no longer exceeded the slip capacity, then that number of studs was defined as a degree of shear connection. By analysing multiple beams, and considering different slip capacities for studs it was possible to define new degree of shear connection rules as a function of span, steel strength, slip capacity etc. An additional variable for unpropped beams was the relative level of imposed load.

Two phenomena differentiate how an unpropped beam behaves compared to a propped beam. Phenomenon 1 is that, self-weight has no impact on the shear studs – the fluid concrete merely 'runs' around them. Only the imposed loads result in forces applied to the studs, transferred via the now hard concrete, as the beam deflects. The relative level of dead to imposed loads, as well as the total load, is therefore important as it affects how much the studs will slip, so it can be readily seen how relative load levels will affect the minimum degree of connection that is needed. A complication, which is why numerical analysis is needed to model beams, is Phenomenon 2. The steel beam experiences higher strains under self-weight when unpropped compared to the same section when propped, because a composite beam typically has over twice the stiffness of the steel beam it is based on. The lower stiffness of the (bare steel) beam in an unpropped situation results in greater deflection and curvature, which means the extreme fibres get closer to their elastic limit under self-weight. When imposed loading is subsequently applied to the composite beam some of the steel then goes beyond its elastic limit (i.e. loses stiffness) 'sooner', deflections are greater as is end slip. This partly counters the lower slip due to Phenomenon 1.

The example numbers given above – 43% versus 91% - show how sensitive the required minimum degree is to the level of imposed loading. It is therefore very important that the P405 rules are not used out of scope, as they would be with a factored imposed load over 12 kN/m^2 (unfactored in excess of say 8 kN/m^2).

BS EN 1994-1-1 gives rules for minimum degree of connection in 6.6.1.2. They do not distinguish between propped and unpropped construction, which means that the ratio of dead to imposed load is irrelevant (they cover the worst case where all loads are assumed to have an impact on the shear studs – i.e. propped construction). These rules may therefore be used for any level of imposed load, although care should always be taken when applying codified rules to very unusual situations as the rules may be based on tests and/or experience that were not representative of the situation actually being designed. Note this does not mean that the stud resistances from BS EN 1994-1-1 may also be used – they have been shown by test to be inaccurate and indeed unconservative when there are two studs per trough.

Unlike its predecessor, Generation 2 EN 1994-1-1 [3], 8.6.3.3 does distinguish between propped and unpropped construction by using a variable k_{up} to adjust the minimum degree of shear connection that is required. This variable has a value of 1.0 for propped, and can could drop to 0.85 at its extreme for unpropped. There is no mention of the relative level of dead to imposed loading, but as the benefit of unpropped is limited to only a 15% reduction in minimum degree getting it right is a much less significant problem than when P405 rules are used.

Heavy and numerous point loads

The subject of heavy and/or numerous point loads has been covered in several recent articles and AD Notes from SCI. Heavy PLs place onerous requirements on a slab in terms of the transverse bending they cause, and the ability of what may be a relatively narrow strip of slab to support them [4, 5]. Loads near a support, for example caused by a MEWP, tend to push the slab's vertical shear resistance to the limit. Local punching through the slab, which is normally never critical, may also be a concern.

Because composite slabs are designed as one-way spanning, the biggest danger with numerous PLs may be that a designer does not appreciate all the loading that will be present on the 1 m wide strip being designed [6]. A PL placed near centre span may well mobilise a strip of slab that is greater than 1 m wide, and if it is sufficiently close (transversely) to another PL they could interact and both need to be considered when determining the input loads. The designer should take care to consider loads near to, not just centred on the line of, the strip being designed.

Conclusions

Experienced designers can often judge whether a design output feels right or not, based on their past experience. For example, anyone familiar with composite slab design will know that the ability of the steel decking to support the wet weight of concrete governs slab design most of the time. However, self-evidently when faced with an unusual situation past experience loses some of its value. In this article we have considered how the current demands from numerous clients to consider heavier floor loads than have been typical, and multiple point loads on some floors, can affect key aspects of composite floor design.

References

[1] P405 Minimum degree of shear connection rules for UK construction to Eurocode 4, SCI, 2015

[2] BS EN 1994-1-1:2005, Eurocode 4 - Design of composite steel and concrete structures - Part 1-1: General rules and rules for buildings, BSI, 2005

[3] BS EN 1994-1-1:2026 Eurocode 4: Design of composite steel and concrete structures. General rules and rules for buildings BSI, 2026

[4] AD450 Resistance of composite slabs to concentrated loads, SCI, 2020

[5] AD477 Transverse bending of composite slabs subjected to point loads. SCI, 2021

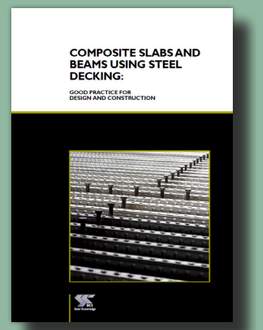
[6] Dealing with multiple point loads on a composite slab. NSC Nov/Dec 2024



ADVERTISING OPPORTUNITIES

Promote your company in partnership with our trusted, global brand and target thousands of new readers.

FIND OUT MORE



WELCOME TO THE TEAM

SCI is pleased to welcome Dan-Adrian Corfar to the team as our new Senior Engineer.

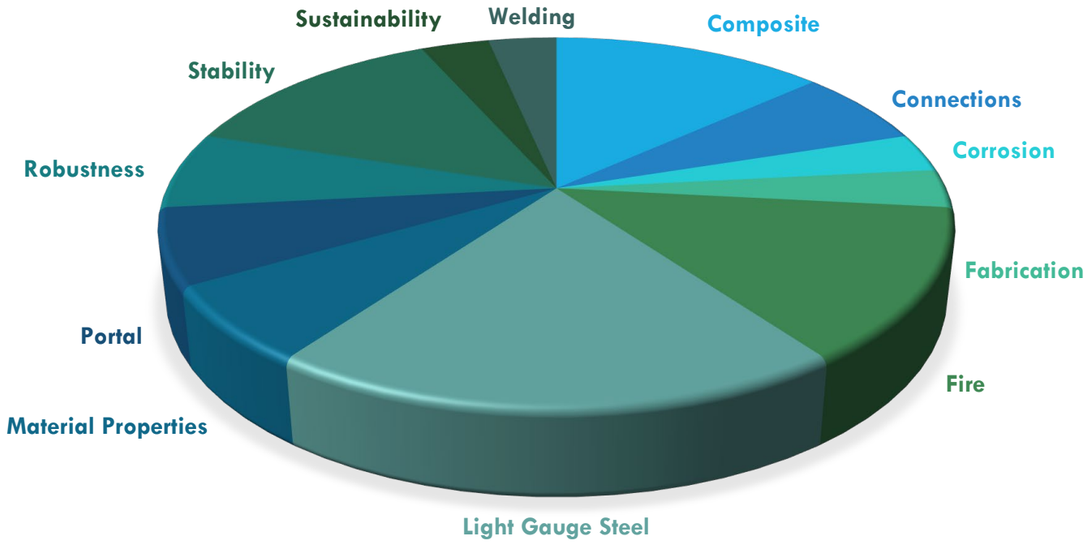
Dan joins SCI following two years as a Lecturer at City St George's, University of London. His expertise spans large-scale structural testing and advanced finite element analysis of steel structures, with research covering modular steel construction, novel connection systems, and cellular beams.

We are delighted to have him on board and look forward to working with him on future projects.

SCI VACANCIES

ADVISORY STATISTICS

A category breakdown of the queries our Advisory team have received in the last quarter:



AD 518:

Classification of sections at elevated temperature

This Advisory Desk Note explains how the reduced value of ε specified for fire design affects section classification and identifies the sections for which a change in classification can affect the calculated fire resistance.

Members can view the full Advisory Desk Note content here.

AD 561:

Longitudinal shear resistance of composite slabs with discontinuous profiled sheeting

SCI's Advisory Desk is sometimes asked about the longitudinal shear resistance of composite slabs with profiled sheeting that is discontinuous across a composite beam, particularly where the transverse reinforcement is positioned above the heads of the shear studs and therefore does not comply with the conventional detailing requirements of BS EN 1994-1-1:2004. This Advisory Desk Note considers the applicability of an alternative full-depth failure surface centred on the row of studs, which may allow the contribution of transverse reinforcement above the studs to be included in the assessment of longitudinal shear resistance.

Members can view the full Advisory Desk Note content here.

THE FOLLOWING ADVISORY DESK NOTES ARE WRITTEN BY SCI AND PUBLISHED IN NSC

AD 540A - Vertical shear resistance of composite slabs and anchorage

Read the full Advisory Desk Note here

AD 559 - Typographical errors in AD 471

Read the full Advisory Desk Note here

40 Years

Celebrating 40 years as the leading provider of best practice in steel construction

SCI / Membership

With major Eurocode changes just around the corner, there has never been a greater need for our support.

SCI experts have been closely involved in the development of Generation 2 Eurocodes 3 and 4.

Join SCI today to get free access to that knowledge and help your transition.

Advisory Desk service

Unlimited access to Steelbiz

Live monthly webinars

First to hear of latest updates

Discounted SCI courses & publications

..and much more.

SCI is committed to helping the steel construction industry meet design, manufacture, installation and commercial objectives.

+44 (0)1344 636525

membership@steel-sci.com

TECHNICAL EXPERTISE

SCI provides its specialist expertise to companies working in steel from manufacture and design, to components and fabrication.

We help SCI members and clients design and improve their products and assist in differentiating them in a crowded marketplace through product innovation and independent assessment.

CONSULTANCY

EDUCATION

Our public courses and webinars keep engineers updated with the latest developments within steel design and equip them to design competently, efficiently and safely.

VIEW ALL TRAINING

PUBLIC COURSE

DESIGN OF LIGHT STEEL FRAMED BUILDINGS

Delivered in 2 Sessions:
Pt 1: 17 Nov | Pt 2: 19 Nov
Time: 10:00am-12:00pm (UK)

This course introduces the uses and typical applications of cold formed steel with particular focus on load-bearing light steel framing.

Specific structural design issues related to light steel framing are addressed, including; robustness and avoidance of disproportionate collapse, connection design and floor serviceability conditions. Other specific topics that are covered include: durability, acoustic performance, NHBC Standards Chapter 6.10 and tolerances.

Each delegate will receive a PDF copy of SCI Publication P402 "Light Steel Framing in Residential Construction"

BOOK YOUR PLACE

PUBLIC COURSE

PORTAL FRAME DESIGN

Delivered in 4 Sessions:
Pt 1: 1 Dec | Pt 2: 3 Dec
Pt 3: 8 Dec | Pt 4: 10 Dec
Time: 10:00am-12:00pm (UK)

Portal frames account for around 50% of the structural steel used in the UK. Although an apparently simple form of structure, the design of portal frames must address the complexities of reversing bending moments, axial compression in slender members, second-order effects of flexible frames and the necessity to provide effective restraints. Despite the extensive history in portal frame design, some of these design issues are not well understood. The course aims to provide in-depth coverage of the major issues surrounding the analysis, design and (crucially) the detailing of portal frames. The course covers frame design to BS EN 1993-1-1.

BOOK YOUR PLACE

PUBLIC COURSE

FATIGUE DESIGN OF STEEL STRUCTURES TO BS EN 1993-1-9

Delivered in 2 Sessions:
Pt 1: 19 Jan | Pt 2: 21 Jan
Time: 10:00am-12:00pm (UK)

This 4-hour course gives structural engineers a thorough grounding in fatigue design of steel structures. The course will cover the fundamental concepts of fatigue and how they relate to the design checks required by BS EN 1993-1-9. Two worked examples (a crane runway beam and a composite bridge beam) will be provides to demonstrate the calculation process. The course is recommended for any structural engineers who design or assess structures subject to cyclic loading, in particular designers of steel frames supporting cranes. It is also recommended for graduate bridge engineers. No prior knowledge of fatigue is required.

BOOK YOUR PLACE

SCI MEMBER WEBINAR

ACOUSTIC DESIGN FOR STEEL FRAMED BUILDINGS

Date: 11 Nov
Time: 12:30-13:30pm (UK)

This webinar will provide an introduction to the sound and acoustic performance of steel framed buildings. It will include background information on sound and implications for acoustic detailing, regulations and requirements

BOOK YOUR PLACE

FREE-TO-ALL WEBINAR

AN INTRODUCTION TO SHEET PILE DESIGN

Date: 25 Nov
Time: 12:30-13:30pm (UK)

This webinar will cover the principles of sheet pile design, highlighting possible pitfalls and opportunities to ensure robust, sustainable and economical results in practice.

The event will be presented by Miles Fenton from Berryrange. He has 14 years' experience in steel sheet piling since graduating from the University of Portsmouth. Working first as a contracts engineer before transitioning to design, he is now Design Manager for the specialist subcontractor Berryrange. Notable past projects include the Tottenham Hotspur Stadium and multiple shafts along the route of HS2.

BOOK YOUR PLACE

SCI MEMBER WEBINAR

STRUCTURAL FIRE DESIGN

Date: 09 Dec
Time: 12:30-13:30pm (UK)

Often overlooked by the structural engineer – the only person who has the necessary information to properly specify the protection! Reliance on "standard" solutions can be conservative and costly, or unsafe. Calculating the resistance and utilisation at elevated temperatures is not difficult – it should be part of the designer's responsibilities.

Join the webinar to see how straightforward the design of steel members at elevated temperatures really is.

BOOK YOUR PLACE

SCI Steel Knowledge

IN-HOUSE COURSES

Did you know that we also run all of our courses in-house, both online or in-person?

These can:

- cover standard course content;
- be tailored to your company specific requirements or;
- be created totally bespoke.

A flat rate is chargeable, regardless of the number of delegates.



EDUCATION@STEEL-SCI.COM

2026 October

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
			1	2	3	4
5	6	7 Portal Frames	8	9	10	11
12	13 Designing in Stainless Steel	14	15 Designing in Stainless Steel	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

2026 December

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 Portal Frame Design	2	3 Portal Frame Design	4	5
6	7	8 Portal Frame Design	9 Structural Fire Design	10 Portal Frame Design	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

SCI Courses

Member Webinars

Free-to-all Webinars

2026 November

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11 Acoustic Design for Steel Framed Buildings	12	13	14
15	16	17 Design of Light Steel Framed Buildings	18	19 Design of Light Steel Framed Buildings	20	21
22	23	24	25 An Introduction to Sheet Pile Design	26	27	28
29	30					

SCI Courses

Member Webinars

Free-to-all Webinars

2027 January

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
				1	2	3
4	5	6	7	8	9	10
11	12	13 Floor Vibrations	14	15	16	17
18	19 Fatigue Design of Steel Structures	20	21 Fatigue Design of Steel Structures	22	23	24
25	26	27	28	29	30	31

BE THE FIRST TO HEAR ABOUR OUR COURSES & WEBINARS

Did you know, you can be notified of the different courses we offer, via email? Simply:

Log into our portal (anyone can register for FREE!)

Under **MY PROFILE** > **PROFILE** > **NOTIFICATIONS/ALERTS** select what you would like to receive

SAVE CHANGES and that's it!

SCI BOOKSHOP

SCI's high quality publications continue to be used as the definitive guidance within the sector. SCI is focussed on providing the latest and best information to ensure best practice is maintained across every aspect of steel

VISIT OUR SHOP

SOCIAL

Check out our upcoming events and keep in touch with us on our social media channels.

X | LINKEDIN | INSTAGRAM | YOUTUBE

MEET THE TEAM: ANDREW WAY



Andrew is an Associate Director at SCI, with experience spanning a wide range of areas gained during his 30 years at SCI. He joined SCI after completing his Masters degree at Nottingham University and is a Chartered Civil Engineer (CEng, MICE). He specialises in cold-formed steel design, light steel framing and design for avoidance of disproportionate collapse as well as acoustic design for steel framed buildings.

You have been at SCI for a long time, how has your work changed over the years?

AW: When I joined SCI I was involved with work related to traditional hot-rolled steel frame construction. This included working on SCI connection design guides for simple and moment connections (The Green Books) and then updates to the Blue Book tables for section properties and member resistances of hot-rolled steel sections which related to the BS 5950 amendments in 2000. At the time these seemed like major changes, but they were only a stepping stone to the more monumental changes that came with the introduction of the Eurocode design standards. Now my work is primarily involved with cold-formed steel design but I am still involved with traditional hot-rolled steel frame design largely because of my specialism in robustness.

What does your current role at SCI involve?

AW: My current role at SCI includes a range of activities, which keeps the work interesting. Most of my projects are for specific clients, helping them develop products or design methods for their products which are typically in the cold-formed steel sector. I also manage the Light Steel Forum, one of SCI's specialist interest groups, which undertakes projects for its members to address challenges in the light steel framing sector. The assessment scheme 'SCI Assessed' is my responsibility. The scheme provides third party, independent assessment of almost any type of product or technical data that is used in steel construction.

As well as projects related to the existing needs of clients, I sit on various committees for codes and standards development at European level for EN 1993-1-3, and national level e.g. National Annexes for BSI and the NSAI committee developing a standard for Light Steel Framing.

What have been the most significant changes during your time at SCI?

AW: My role at SCI has changed significantly over the years as I've worked on different aspects of steel construction, but also now being an Associate Director, my level of responsibility has grown and given me a different perspective. There have been changes for the whole industry during my time at SCI, notably the introduction of Eurocodes and now we are preparing for the introduction of Generation 2 Eurocodes. More recently there has been the increased focus on fire safety which has affected our work at SCI, as we work to answer the many questions raised on the topic.

One of the most significant changes specific to SCI has been the shift in our funding sources. When I started, a significant amount of SCI funding was from British Steel (and then Corus and Tata), this has now all but disappeared and SCI has had to adapt to this. The other change has, of course, been BREXIT. SCI has always had strong European links and historically has participated in many European funded collaborative research projects. Whilst we maintain links with our European colleagues, SCI has also successfully developed alternative funding opportunities.

Overall the changes have kept things interesting. So whilst I have been at SCI for a long time, there are always new exciting projects to work on. Like me, SCI has changed a lot over the last 30 years. The company has evolved over time, continuing to provide valuable support to the sector, and I am proud to be a part of this.

What do you do outside work?

AW: Outside work I spend most of my time with my family, but my main hobbies would be fell-walking and football. I particularly enjoy walking in the Lake District and try to visit as much as possible, but it is a bit of a trek from Berkshire! Walking our dog in the local countryside suffices in between trips to The Lakes. I play football most weeks and I am a season ticket holder at West Ham United.

Andrew Way, Associate Director, SCI
Connect with Andrew on LinkedIn

OFFSITE AWARDS 2026

Last month, SCI's Graham Couchman returned to the judging panel for the Offsite Awards 2026 in Birmingham, UK and we, once again, proudly sponsored the Best Use of Steel Technology award.

A big congratulations to Panacea Systems on being crowned the winner of this category.

The award recognised the landmark Downtown Victoria North development in Manchester, rewarding the outstanding use of light gauge steel frame and related constructional steel elements. Special attention was given to how steel has been used throughout the project, its material performance levels, circular economy principles and the demonstration of sustainability, cost-predictability, accuracy, transportability, speed of installation and wider principles of lean manufacture.

Well done to all of the winners and thank you to Offsite for another fantastic event!



FABIG ACTIVITIES

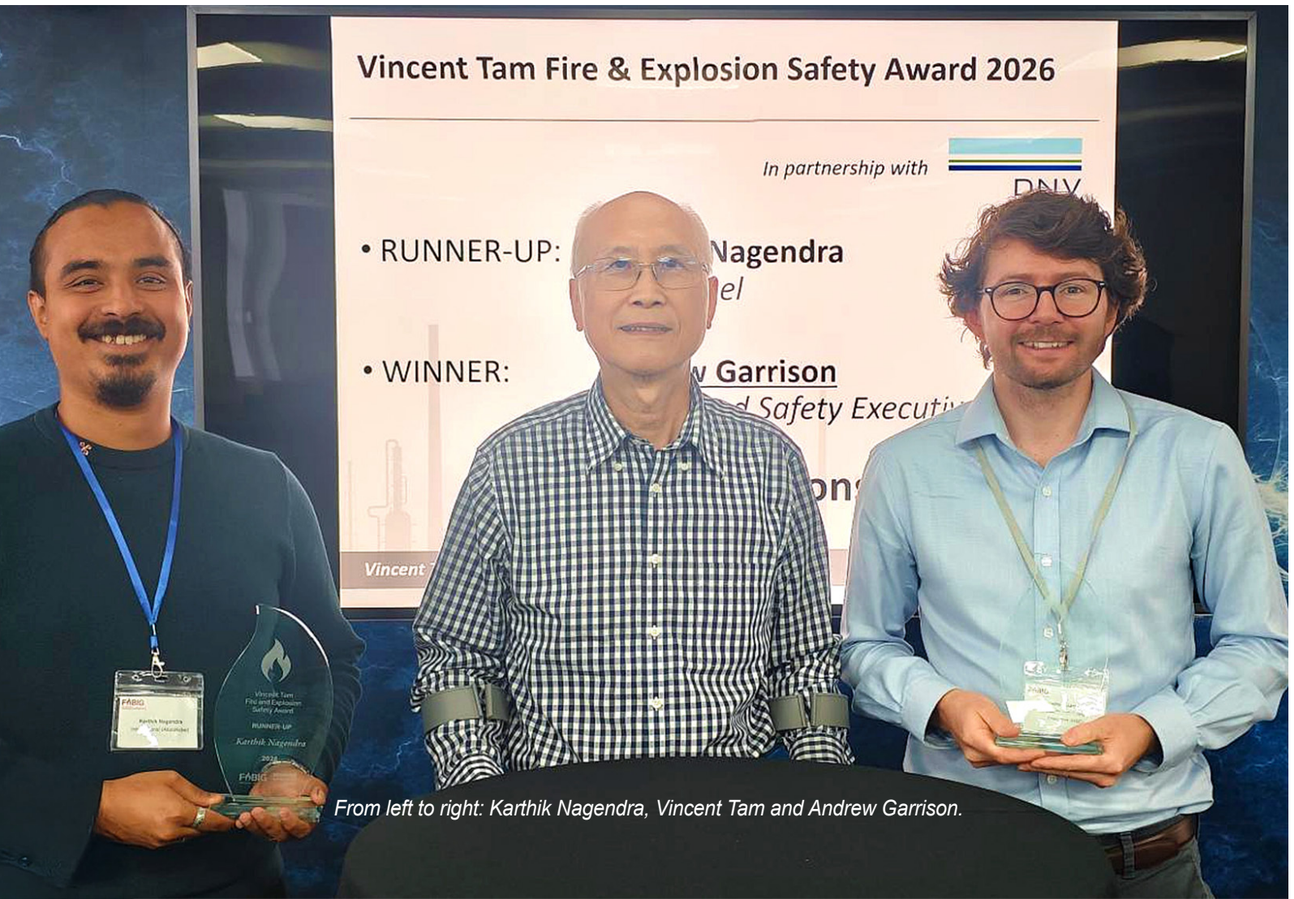
FABIG Technical Meeting & Award presentation

SCI's Fire And Blast Information Group (FABIG) recently held another successful 2-day Technical Meeting covering 'Energy Transition Hazards in Motion' on 9th & 10th September 2026 in London and via Live Webcast. The programme comprised 16 presentations addressing the management of hazards arising from the transport of hydrogen, ammonia and CO_2 (by road, sea and pipelines) as well as the use of new energy sources (hydrogen, ammonia and batteries) for vehicle propulsion. The results of several research projects including ARISE, SafeAm, ROAD THRYP, FutureGrid, DACOLLS and Skylark were presented during this event, for which more than 230 delegates registered.

This Technical Meeting also comprised the presentation of the 1st edition of the Vincent Tam Fire & Explosion Safety Award, and we are delighted to announce Andrew Garrison (Health and Safety Executive) as the Winner, and Karthik Nagendra (AkzoNobel) as this year's Runner-up. Sponsored by FABIG and DNV Spadeadam Research & Development, the award celebrates excellence in fire and explosion safety among early-career practitioners and researchers. The winning prize is free attendance at one of DNV's training courses at Spadeadam Research & Development, where delegates experience live fire and explosion demonstrations, or registration for a relevant fire and explosion safety course or conference. The Award will be presented on a yearly basis and we hope that it will give young engineers and scientists an extra nudge towards continuing their careers in fire and explosion safety.

International Process Safety Day 2026 - Free registration

FABIG will be collaborating, once again, with the Centre for Chemical Process Safety (CCPS), the European Process Safety Centre (EPSC), the IChemE Safety Centre (ISC), and the Mary Kay O'Connor Process Safety Centre (MKOPSC) to organise International Process Safety Day 2026, to be held on **2nd December 2026**. The objective of the IPSD is to raise awareness of the importance of process safety worldwide for the prevention of industrial accidents. This will be a free-to-all full-day virtual event providing delegates with circa. 8 hours of technical content, including technical presentations and panel discussions from industry experts covering a wide range of process safety topics. These will be replayed over 24 hours to cover all time zones. We are pleased to advise that registration for the IPSD 2026 is now open, so please click here if you would like to attend.



From left to right: Karthik Nagendra, Vincent Tam and Andrew Garrison.

MEMBER NEWS

View all SCI Member News on our News and Media website.

NEWS & MEDIA

75 YEARS STRONG: ANGLE RING COMPANY CELEBRATES LEGACY, INNOVATION AND THE FUTURE OF BRITISH STEEL BENDING

'Tipton-based Angle Ring Company is celebrating its 75th year in business in 2026, marking a major milestone for one of the UK's leading steel bending specialists.

Founded in 1951 by Frank Barnshaw, The Angle Ring Company has grown from its West Midlands roots into a third-generation family business with one of the largest ranges of steel bending capabilities in the UK.

Based at its single-site production facility in Tipton, the company supports fabricators, architects, steelwork contractors, civil engineers and general engineers across the UK and internationally. Its work spans a wide range of sectors, including architectural and construction, industrial, offshore, defence, civil engineering, energy and manufacturing.

Over the next six months, Angle Ring will be honouring 75 years of excellence by sharing stories from its rich history, celebrating key milestones and memorable moments, and highlighting the people, projects and culture that have shaped the business over the decades.

As part of the celebrations, Angle Ring is also inviting customers, former employees, residents and those connected to the business over the years to share memories, stories and photographs that help tell the story of Angle Ring and its place within the Tipton community.

The anniversary campaign will look back at the company's legacy while also focusing on the future, exploring how Angle Ring continues to support major UK and international projects through specialist steel bending, technical expertise and investment in future engineering talent.

Angle Ring's connection to Tipton remains central to its story. Alongside its role as a local employer and specialist manufacturer, the company continues to help showcase the strength of engineering and constructional steelwork in the West Midlands.

This has included welcoming Antonia Bance, MP for Tipton and Wednesbury, to its facility as part of a British Constructional Steelwork Association programme, and taking part in a Sandwell Council-led campaign celebrating the people, innovation and industries helping to shape the region's future.'

Anyone with memories, photographs or stories connected to Angle Ring is encouraged to get in touch by emailing marketing@anglering.co.uk.



SUPPORTING A COMMUNITY INITIATIVE ON OUR DOORSTEP

'Caunton Engineering is proud to be fabricating the steelwork for a new Men's Shed being built in Brinsley, just a short distance from our headquarters.

This project brings together local heritage, community wellbeing and engineering expertise to create a facility that will benefit residents across the area for years to come. As a Nottinghamshire-based business, it is particularly rewarding to support a project so close to home and help deliver a space that will have a lasting impact on the local community.

The new Shed is being developed by Eastwood Shed, a local charity dedicated to reducing social isolation and improving wellbeing through practical crafts, skills sharing and community engagement. The facility will offer a welcoming environment where people can learn new skills, work on personal projects and enjoy the companionship that comes from working alongside others.

Inspired by the international Men's Shed movement, the facility will be open to all adults aged 18 and over. Members will have access to a fully equipped woodworking workshop, dedicated areas for crafts and creative activities, space for electronics and computing projects, and comfortable social areas where people can meet, chat and exchange ideas.

Caunton Engineering is providing the steelwork that will form the backbone of the new facility, helping to create a robust and versatile building capable of supporting a wide range of activities. Once complete, the Shed will become a valuable community asset, providing opportunities for learning, creativity and social connection. The project will also support Eastwood Shed's partnership with Tools With A Mission (TWAM), with space dedicated to collecting and refurbishing donated tools, sewing machines and computers that can be given a second life supporting communities overseas.

For many people, particularly those who have retired or live alone, opportunities for regular social interaction can become limited. The new Shed aims to address this by creating a welcoming place where members can work together on community projects, learn from one another, share skills, enjoy a cup of tea and, most importantly, build lasting friendships.

Paul Lake, Chair of Eastwood Shed, said: "We are being contacted by so many people who want to get out and meet others. So many people, men especially, finish their working life and miss the companionship and banter of the workplace. Eastwood Shed will be a place where they can come, work together on community projects, make something for themselves, refurbish a tool that someone no longer needs to give it a new life enabling someone to make a livelihood again through TWAM, or simply sit and have a chat over a cup of tea."

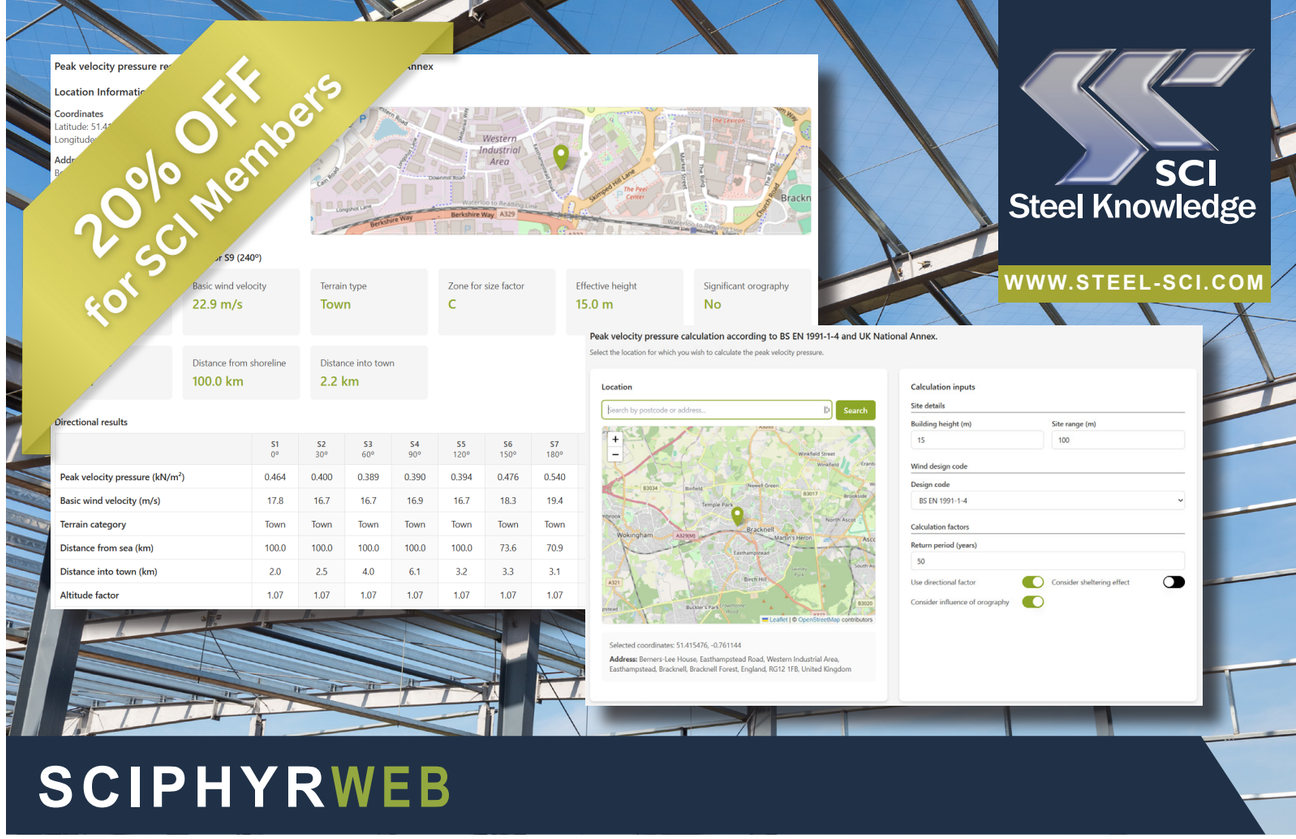
The project has been made possible through the generosity and collaboration of several organisations, all of whom have contributed materials, services and expertise free of charge. Support has been provided by Hadley's for the shed structure, Bowring for transport, Metsec for support rails, Eagle Platforms for plant equipment, Worksop Galvanizing for steel paint protection, and STREtek for Falcon timber boarding.

Caunton Engineering has also donated significant expertise and resources to the project, including the steel grillage, site engineering, design and coordination of the frame and ground screw positions, fabrication, and overall project management. This collective effort highlights the power of local businesses working together to support a project that will deliver lasting benefits to the community.

We are delighted to be involved in bringing this project to life and look forward to seeing the new Men's Shed become a thriving hub for the local community. It is a fantastic example of how collaboration between local charities and businesses can create something truly meaningful, leaving a positive legacy for generations to come.'

For more information, visit Caunon Engineering's website.





The smart and simple way to perform wind analysis

Easily accessible from any device via your web browser, **SCIPHYRWEB** provides users with accurate peak velocity pressure calculations within seconds for any site across the UK and Ireland without the need for downloads or installations. Whether designing façades, roofs, or entire buildings, **SCIPHYRWEB** delivers accurate wind pressure calculations specific for your site location.

- **SPEED** Making the most of cloud-based technologies to ensure high-performance
- **COMPREHENSIVE** Cover of the UK and Ireland for BS-6399 and BS-EN-1991-1-4 UK NA
- **INTUITIVE** A user-friendly interface designed for optimal usability
- **PRECISE** Up-to-date and high-resolution terrain database
- **HOLISTIC** From location specific data to complete peak velocity pressure in twelve directions
- **YEARLY** Updates and licensing period
- **RELIABLE** Developed, tested, and maintained by SCI

SCIPHYRWEB is available to license from SCI. Visit our website or contact us for a **FREE** trial.

SCI is committed to helping the steel construction industry meet design, manufacture, installation and commercial objectives.

Click or scan for more info

+44 (0)1344 636525
software@steel-sci.com



SCI
Steel Knowledge

SCI, Unit 2, The E Centre, Bracknell, RG12 1NF

Reception:	+44 (0)1344 636525
Email:	hello@steel-sci.com
Web:	www.steel-sci.com
Membership:	+44 (0)1344 636525
Advisory:	+44 (0)1344 636555
Publications:	+44 (0)1344 636505
Courses:	+44 (0)1344 636500

ONLINE RESOURCES

Steelbiz:	portal.steel-sci.com
SCI Shop:	portal.steel-sci.com/shop.html