

# CUTTING EDGE



For members of the  
Institute of Carpenters

Spring 2025



## MERLANETROPHY 2025

Are you ready to showcase your  
skills to win the coveted trophy?  
Read an overview and how to register



### ON-SITE ASSESSMENT AND TRAINING (OSAT)

An alternative route to apprenticeships

### RESPONSIBLE WASTE DISPOSAL

What you need to know





# NAIL IT WITH GlueUp



The IOC's membership platform (Glue Up) will enhance your membership experience as it enables you to share your thoughts, book events, access benefits, and view your membership details all in one place.

Importantly, it will also allow you to network, make connections across the Institute's membership, and view and comment on other members' inspirational work and achievements.

More than half of the paid members have now signed up for Glue Up, so what are you waiting for?

The platform is free of charge and only takes a couple of minutes to register. Simply use the QR code or go to **<https://app.glueup.com/register/account>**.

To sign up you will need to input the email linked to your membership account.

## Competition

A random member who signs up for Glue Up and then attends the IOC & NAS Members' Day on 14 May 2025 will be selected that day to win a prize.

## Editorial

01296 625518

info@instituteofcarpenters.com

**Editor:** Denise Tabone

**President:** Geoff Rhodes FIMMM MIOD

**Patron:** HRH The Duchess of Gloucester

Cutting Edge is the journal of the Institute of Carpenters and is issued to members by the Institute of Carpenters (IOC), 32 High Street, Wendover, Bucks, HP22 6EA.

The material may include opinions, recommendations, or other content from third parties that does not necessarily reflect the views of the Institute of Carpenters.

Before relying on the material referred to in this publication, users should independently verify the accuracy, completeness and relevance for their purposes and obtain any appropriate professional advice. Links to other websites are included for the user's convenience and do not constitute an endorsement of the material on those sites, or any associated product or service.

## Institute of Carpenters

A company limited by guarantee.

Registered in England No. 00076125.

VAT Registration No. 651 6043 57.

Registered Office:

32 High Street, Wendover, Bucks, HP22 6EA.

01296 625518

info@instituteofcarpenters.com

www.instituteofcarpenters.com

## Head Office

01296 625518

info@instituteofcarpenters.com

## Subscriptions

Jen Rainnie or Jane Murphy,

Webscribe Ltd

01442 820585

ioc@webscribe.co.uk

## Membership Packs/Cards, Exams and Certificates

David Winson FIOC

07860 912320

david@central-office.co.uk

## Membership Enquiries/Upgrades

Head Office

01296 625518

info@instituteofcarpenters.com

Cutting Edge is printed by Warners Group

Publications, West Street, Bourne, Lincs PE10 9PH

Cutting edge is designed by Warners Group

Publications, visit: www.warnersgroup.co.uk

## Advertising

Advertising enquiries: Theresa Geeson

Email: theresag@warnersgroup.co.uk

Copyright © 2025 Institute of Carpenters. All rights reserved. Reproduction in whole or part without written permission is strictly prohibited. Colour transparencies, manuscripts or disks submitted to the Institute are sent at owner's risk; neither the Company nor its agents accept any responsibility for loss or damage.

Unsolicited material should be accompanied by a stamped self-addressed envelope.

**Cover image:** The amazing team at Atelier Desmonts under one of the principal frames of the nave of Notre-Dame de Paris. pc Lóic Desmonts

## Welcome to the Spring 2025 edition of Cutting Edge.

It has been a busy period here at head office as we welcome new members – both qualified and students, new corporate members and colleges, as well as talking to existing members.

As always, any comments or suggestions for editorial pieces are welcome along with feedback on the new look Cutting Edge.

Thank you once again for your continuing support. If you have any questions or need to contact the IOC at all, you can email us at:

info@instituteofcarpenters.com

*Denise*

**Denise Tabone**, Administration Manager

March 2025

## IN THIS EDITION...

### 4 President's update

### 5 The Director's cut

### News roundup

### 6 A warm welcome to our new members

### 7 Latest industry and HSE news

### Members benefits

### 8 Courtprice, why you should consider protecting yourself from potential financial liabilities

### 9 Director James Filus discusses the aims of the IOC Standards Sub-Committee

### 9 Financial credit checks are available through the CreditSafe platform

### 10 Feedback on the IOC to understand what you value most and help shape future activities

### 10 Access discounted fuel cards

### 11 Discounted Fleetwise cover from the AA

### 11 Learn more about the Professionally Qualified Person (PQP) – CSCS card

### Competitions

### 12 Merlane Trophy 2025: Details of the 46th competition

### 12 Carpenters' Craft Competition: Important dates and links

### 13 We celebrate the winners of the 2024 3rd Year Students' Award, Rainleaf Trophy and the Robert Rampley Memorial Award

### Events

### 14 A look at the IOC and NAS Members' Day, taking place on 14 May 2025

### 14 The next Timber Industry City Hub: Thursday, 27 March at Exeter College, Falcon House campus

### Skills and training

### 15 CITB: A look at the levy proposals, consultation process, and recommendations from a recent Government report

### 16 A look at the On-Site Assessment and Training (OSAT) method

### Industry interview

### 18 Responsible waste disposal: What tradespeople, including carpenters and joiners, need to know

### 19 Mike Dennis shares his journey into carpentry and joinery, as well as his involvement in remarkable projects around the world

### Educational

### 22 Material Science and the Woodworker, Part 29: Steel and Iron – Carbon part 2: The latest article in the series from the late Dr Brian K. Hodgson

### Case study

### 24 The Techniques of Stereotomy: Part 3 in a 3-part series from Patrick Moore

### 26 Martin Howlett discusses why MEDITE MR is the ideal material to create his stunning bespoke furniture projects

### Industry visit

### 28 President Geoff Rhodes shares his thoughts on attending and giving a presentation at the Timber Construction Europe (TCE) General Assembly in December 2024

### Members news

### 29 Latest creations from our innovative and expert members



Geoff Rhodes FIMMM MIOD | IOC President



Welcome to the latest edition of Cutting Edge. After an extremely busy period, I have a lot to share, including some thrilling news: we will have a very special guest at our 10th IOC Timber Industry College Hub event at Exeter College on March 27.

Following regular communications with the team at Kensington Palace, I am delighted to tell you that our Royal Patron, Her Royal Highness Birgitte, The Duchess of Gloucester KG GCVO, will be attending our 10th IOC Timber Industry College Hub event at Exeter College on March 27. She will be meeting with speakers, staff, and student learners, as well as touring the facilities.

This event is the final hub as part of the 2-year Construction Industry Training Board (CITB) - IOC Mentoring Champions' Scheme, which has been at various locations across the UK.

Over 1,000 students have benefitted from these events, listening to a selection of industry specialists and learning about the variety of career opportunities within the construction industry.

When there is so much discussion about the industry's skills crisis it is good to know that the IOC is playing its part, in partnership with our colleges and wide-ranging industry supporters.

We delivered our 8th CITB - IOC Timber Industry College Hub event at Stafford College (NSCG) on 14 November 2024, and in the New Year, our 9th event took place at Northampton College on 16 January. Both events were extremely successful.

Over the last quarter, I have represented the IOC at the Construction Leadership Council (CLC) meetings, as well as at the second meeting of the Careers & Enterprise Company - House Building Skills Roundtable. Both events proved valuable and important for ensuring the IOC has a voice.

The IOC's 3rd Year Student of the Year Award continues to go from strength to strength, with the 2024 winner and recipient

of the Rainleaf Trophy this year coming from West Suffolk College. Three Highly Commended students were recognised from Accrington and Rossendale, Northampton, and York colleges. A big thank you to our corporate industry supporters Axminster Tools, Ironmongery Direct, Medite SmartPly, and Reisser UK for providing valuable prizes. All four prize winners have been invited to join our IOC student ambassadors' group, which aims to bring fresh input to the Institute from a younger generation.

More colleges teaching woodworking skills, along with their students, continue to join the IOC, as well as trained professionals and corporate members. Let us give a warm welcome to all of them.

The IOC Board continues to review the progress made so far as we work together

with NAS to deliver our four major projects. These projects focus on dynamically growing our IOC membership, improving our communication strategy and processes, further developing our partnership and governance procedures, and embedding the IOC's vision and values to ensure they are consistently used.

I hope you are beginning to notice these improvements. I want you all to be proud of what you are accomplishing both individually and collectively, and I trust I can count on your continued support. ◀

## Geoff Rhodes

FIMMM MIOD | IOC President

Her Royal Highness Birgitte,  
The Duchess of Gloucester KG GCVO



James Filus | IOC Director



**James Filus**, Director, emphasises that progress must be meaningful and purposeful, not just for the sake of progress. He shares his thoughts on the modernisation of the organisation since his appointment and, with your support, looks forward to what lies ahead.

**W**hile I was taking stock at the beginning of the new year and thinking about ideas for this column, two phrases kept coming to mind. I am not sure who to best attribute the first one to, as it has been said many times before, but: If you are not moving forward, you are moving backward. The second phrase is a related one, often attributed to Will Rogers, an American cowboy (the ranch type, not the building type): Even if you are on the right track, you will get run over if you just sit there.

Both phrases emphasise the importance of (figuratively) continuing to put one foot in front of the other to make progress, along with the risks of failing to do so. This applies not only to individuals but also to organisations like the Institute of Carpenters (IOC) and the National Association of Shopfitters (NAS), which have existed for many years — 135 years in the case of the IOC. I am certain that such achievement did not come about by standing still.

But progress cannot be for progress's sake; it must be meaningful and purposeful. Since being appointed as the IOC's Director, there has been much change to modernise the organisation. I mentioned in the last edition that initial discussions had begun on the viability of reintroducing a form of entrance exam for the IOC. Those discussions are progressing, and a Standards Sub-Committee is being formed. I am very grateful to the many members who have stepped forward to help shape this important piece of work so far. The opportunity to get involved remains open if you are keen to contribute.

While an IOC entrance exam is one aspect of this ongoing discussion, that is just one possible solution — it is not the aim or purpose. For me, the aim is ensuring that the wood trades are seen as professional, aspirational career, with the IOC living up to its new vision of being the home for those professionals. Once that has been achieved, I will be able to say that our modernisation programme has been completed (albeit I am sure there will be another challenge to rise to at that point!).

This is, of course, only my perspective, but I am grateful it is one shared by the IOC's Board. It is also important that this journey reflects the desires of our members, ensuring we are on the right track (as Will Rogers said). The next question is simply how fast we move to avoid being hit.

With the above in mind, we are launching a member-wide survey to gather your feedback on how we are doing. We

last conducted a similar survey in 2022, and the results helped shape our recent activities. Please take the time to share your thoughts. More information about the survey can be found on page 10 of this edition of Cutting Edge. We will also post the relevant link on Glue Up and the IOC's website at the time of publication.

Last but not least, our shared AGM and Members' Day will be held at Carpenters Hall on 14 May 2025. If you are attending, I look forward to seeing you in person.

If you would like to share your thoughts on other topics you feel passionate about, please do not hesitate to contact me via email: [james.filus@shopfitters.org](mailto:james.filus@shopfitters.org) ◀

## James Filus

IOC Director



# WELCOME TO OUR NEW MEMBERS

## Fellow

- Carl Grayson (Cheshire)
- David Morton (Staffordshire)
- Ben Chan (Leicestershire)
- Peter Kitterick (Hertfordshire)
- Alexander Beauguard (Surrey)

## Member

- Gary Middleton (Argyll and Bute)
- Sam Poland (North Yorkshire)
- Les Hobson (South Yorkshire)
- Will Watson (Nottinghamshire)
- Darron Carver (West Sussex)
- Paul Chapman (West Sussex)

## Student

- Michael Tarren (County Durham)
- Callum White (County Durham)
- Finlay Mckenzie (Kingston upon Hull)
- Aeddán Bate (North Yorkshire)
- Jude Cowan (North Yorkshire)
- George Dales (North Yorkshire)
- Tom Dale (North Yorkshire)
- Luca Davey (North Yorkshire)
- Danny Dinis (North Yorkshire)
- Kyle Ezard (North Yorkshire)
- Kane Fox (North Yorkshire)
- Archie James (North Yorkshire)
- Finlay Kerr (North Yorkshire)
- Oliver Moss (North Yorkshire)
- Alfie Parker-Russell (North Yorkshire)
- Kyran Peacock (North Yorkshire)
- Charlie Pearce (North Yorkshire)
- Dan Teare (North Yorkshire)
- Freddie Turner (North Yorkshire)
- Lucas Jacobson (East Riding of Yorkshire)
- Daniel Lister (East Riding of Yorkshire)
- Ethan McQuillan (East Riding of Yorkshire)
- Zak Martin (West Yorkshire)
- Luke Jackson (Lancashire)
- Adam Ioannou (Merseyside)
- Billy Boulton-Lear (Derbyshire)
- Kieron Day (Derbyshire)
- Harley Doyle (Derbyshire)

- Henry Gagen Hill (Derbyshire)
- Xander Jordan (Derbyshire)
- Joe Kidd (Derbyshire)
- Connor Pickford (Derbyshire)
- Jack Shanks (Derbyshire)
- Ellie-Louise Wren (Derbyshire)
- Kyle Lowes (Lincolnshire)
- Kaitlyn Sanderson Stevenson (Lincolnshire)
- Ellis Tomlinson (Lincolnshire)
- Gabriel Meachin (West Midlands)
- Scott Bagshaw (Staffordshire)
- Laison Battison (Staffordshire)
- Frazer Burton (Staffordshire)
- Lilia Campbell (Staffordshire)
- Kieran Carr (Staffordshire)
- Mason Challinor (Staffordshire)
- Matt Cooper (Staffordshire)
- George Neale (Staffordshire)
- Jenson Peate (Staffordshire)
- Ben Riley (Staffordshire)
- Theo Sharman (Staffordshire)
- James Whilock (Staffordshire)
- Mitchell Beeton (Cambridgeshire)
- Oliver Berkelmans (Cambridgeshire)
- Jordan Hicks (Cambridgeshire)
- Tyler Ashdown (Suffolk)
- Samuel Bayes (Suffolk)
- Adam Dale (Suffolk)
- Aidan Geoghegan (Suffolk)
- Dylan Goodwin (Suffolk)
- Ryan Fosker (Suffolk)
- Lewis Kenny (Suffolk)
- Jed Maxwell (Suffolk)
- Luke Morley (Suffolk)
- Harry Roberts (Suffolk)
- Hayden Sturgeon (Suffolk)
- George Suttle (Suffolk)
- Keanu Vince (Suffolk)
- Mena Eyeregba (London)
- Shaydon Gurey (London)
- Francesca Leibowitz (London)
- John Newby (London)
- Zabur Sogbade (London)
- Brendon Foster (Greater London)

- Joshua Bailey (Essex)
- Ethan Chinery (Essex)
- Chay Griffiths (Essex)
- Luke Glyde (Essex)
- Ben Askaroff (East Sussex)
- Nathaniel Felton (Medway)
- Enrico Bernardi (Devon)
- Adam Sykes (Devon)

## Corporate

- Lumin:  
<https://www.lumin.com/english/>
- Grown in Britain:  
[www.growninbritain.org](http://www.growninbritain.org)

## College

- Cambridge Regional College:  
[www.camre.ac.uk](http://www.camre.ac.uk)

## Congratulations

Congratulations to Tim Hayes on being upgraded to Fellow of the Institute of Carpenters.

Do you know someone who works in wood trades who isn't a member of the IOC? All it takes is one short moment to send them a quick email point them to [www.instituteofcarpenters.com](http://www.instituteofcarpenters.com) to find out more and tell them why they should join. So, go on, take that moment now and encourage some more members to join! Likewise, if you know someone already in membership who deserves to be upgraded, please do let us know.

Do you have any college contacts in Northern Ireland and Scotland? If so, we would very much like to hear from you at: [info@instituteofcarpenters.com](mailto:info@instituteofcarpenters.com).



## INDUSTRY NEWS

- The Furniture Makers' Company is offering a free, confidential support around the clock to anyone in need of help. Text 'COMFORT' to 85258
- Construction Industry Helpline: 0345 605 1956 or text HARDHAT to 85258. Providing financial and emotional support to the construction community and their families: To find out more visit: <https://tinyurl.com/mdjprft8>
- The UK education construction sector has experienced its strongest quarterly growth since 2020. After a period of underperformance, successive increases in output during Q2 and

Q3 2024 indicate a shift in momentum. To read the story in full visit: <https://tinyurl.com/mw57xcaa>

## HSE NEWS AND GUIDES

To view the latest news on Health and Safety at Work visit: <https://tinyurl.com/ys3aer8e>

## SEARCH TODAY FOR THE STAR OF TOMORROW

Joe Sadler, Business Development Executive, Apprenticeships Team at Eastern Education Group



Things are changing in the world of education. Young people are learning in different ways and as a college, we are trying to keep up with it, explains **Joe Sadler**.

It feels a little late to be saying 'Happy New Year', but I shall wish you one anyway— 2024 was great, and I think 2025 will be even greater. It seems that, no matter what challenges are thrown our way, the carpentry and joinery industry continues to thrive.

Here at the Eastern Education Group, we had record numbers of aspiring students walk through our doors in September 2024 and are ready for more of the same this year.

So, if you are reading this as a company considering taking on an apprentice or offering work experience, and asking yourself, 'Why should we? What's in it for us?' — the answer, in short, it is lots of things.

**Financial:** The Government announced in 2024 that they would pay 100% of the training costs for non-levy employers who enrol learners aged 16-21. This allows you to train and develop somebody right from the start, as well as being able to mould them into the perfect person for your business.

**Training:** We are seeing more and more young and ambitious Carpenters and Joiners keen to make their impact. Now is the time to take one on. There is a lot of talent out there, and for colleges, it is our duty to make sure we get them trained correctly for you.

**Recruitment:** There is no right or wrong time to start the process of looking for someone. Programmes typically start in September, but my advice to you as an employer would be to get it sorted early. We always say March/April are the 'hot months' to catch the best talent, as people may be approaching their GCSE's, or coming to the end of their current course, which is where they will typically be looking for their next challenge.

I would suggest getting an advert out there, posting something on social media, and seeing who gets in touch. I would always recommend inviting candidates for a trial day and having a meeting. That way, you can assess them right away and determine if they are a good fit for your business.

Also, do not forget to post any opportunities on the GOV.UK National Apprenticeship Website, as that's where people are actively searching for them.

There is a big year ahead here at Eastern Education Group, a really exciting one. The next time I write this column will be before the mad rush comes and as always, if there is anything we can do for you here, please do just shout.

**Joe Sadler, Business Development Executive, Apprenticeships Team at Eastern Education Group**



# PROFESSIONAL INDEMNITY INSURANCE

As a sole trader or small business owner, protecting yourself from potential financial liabilities is crucial. **Courtprice**, the appointed insurance advisers to the IOC, discusses Professional Indemnity (PI) Insurance, which covers claims of financial loss caused by negligent work, advice, or certification.



## What does PI Insurance cover?

PI Insurance provides protection for:

- Negligent design or advice: Mistakes that lead to financial loss.
- Breach of contract: Failure to meet contract terms.
- Copyright infringement: Claims of unauthorised use of intellectual property.
- Financial loss through negligence: Errors causing client losses.
- Defamation: Legal costs and damages related to defamation claims.

## Who needs PI Insurance?

Carpenters and Joiners, Plumbing and Heating Engineers (especially those that are Gas Safe registered), and Electricians should have PI Insurance. This cover is purchased in addition to Public and Products Liability.

If you charge for design or supervisory work, you could be liable for your negligence, making PI Insurance an essential part of your Liability protection.

**Premiums start from as little as £150 for £100,000 cover!**



[chrissy@courtprice.co.uk](mailto:chrissy@courtprice.co.uk)



Call 0121 447 7555





# THE AIMS OF THE STANDARDS SUB-COMMITTEE OF THE INSTITUTE OF CARPENTERS (IOC)

Standards Sub-Committee of the Institute of Carpenters (IOC):  
A look at the aims, including ensuring that wood trades are recognised as a professional, aspirational career that commands respect. Now, the hard work begins.



**A**s mentioned in an earlier edition of Cutting Edge, a Standards Sub-Committee for the IOC is currently in its formative stages. Initial discussions took place in November 2024, followed by another meeting in early February, with long-standing, experienced, and knowledgeable IOC members, key collaborators, and representatives from our IOC College members all participating, explained **James Filus**, Director.

James said: "For now, I am taking the lead on this. However, I recognise that my experience is more in helping knowledgeable people find the right answers than in knowing them myself. I say this fully aware that I am neither a carpenter, joiner, nor shopfitter – but I do happen to know a lot of them!"

"It would be easy to view standards at an organisation like the IOC as a simple line in the sand, determining who can (or cannot)

join. Personally, I feel that looking at it this way is too narrow and does not live up to our core values of promote, support, and develop. I believe it is better to ask ourselves what we are ultimately aiming to achieve, and then determine how the standards set at the IOC can play a role in delivering that aim."

James continued: "In the September 2024 edition of Cutting Edge, I shared my experiences visiting the Zimmerer Zentrum Holzbau in Germany and how being a carpenter, and more specifically a Master Carpenter, is a position of respect and great pride. For me, achieving the same recognition here in the United Kingdom should be our aim. We must work to ensure that the wood trades are viewed as a professional, aspirational career that commands respect.

"With that as the aim, I believe the next question is simply: how can the IOC help make it happen? This is certainly not something that will be achieved overnight, but as one of my



James Filus,  
Director

colleagues used to say: "There is only one way to eat an elephant – one bite at a time."

James concluded by saying: "If you would like to share your thoughts or energy to this topic, please contact me via email:

**james.filus@shopfitters.org**

"Otherwise, I will continue to update all our members as the discussion progresses through Glue Up, Cutting Edge, and our website."

## FINANCIAL CHECKS AVAILABLE THROUGH CREDITSAFE

**I**nstitute of Carpenters members can now run credit checks via the National Association of Shopfitter's CreditSafe platform. By using CreditSafe you will be able to run financial checks on clients as well as your supply chain. The NAS has allocated a significant number of searches to the IOC, but overall use of the platform is capped – so please bear this in mind. Usage of the system will be monitored while we establish the value and relevance to IOC members.

**creditsafe**

You will need to use the following details to access the IOC's account:

Visit: <https://wl.creditsafe.com/live>

Enter: Username: **Institute.Carpenters**

Password: **NAS2022**

If you have any questions about using the platform, please contact the team at: **enquiries@shopfitters.org**.

# TIME TO NAIL DOWN YOUR THOUGHTS AND HAVE YOUR SAY

Following our 2022 feedback survey, we are once again seeking your thoughts on the Institute of Carpenters (IOC).

**B**y completing a short survey, you will help us understand what you value most about your membership as well as help shape our future activities.

We have experienced a period of significant change since our last survey, including partnering with the National Association of Shopfitters (NAS), working with the Construction Industry Training Board (CITB) to complete our Mentoring Programme, launching Glue Up, our membership platform, adding several new membership benefits, and redesigning our Cutting Edge magazine with our

new supplier, to name just a few. There is even more to come, but we need to know whether you — our valued members — feel we are on the right track.

The survey should take around 10 minutes to complete and one lucky respondent will be selected at random to receive a £50 gift voucher — not a bad return for less than the time it takes to make and drink a cup of tea!

You can complete the survey by visiting: <https://forms.office.com/e/HMrLdT6e4A> or by using the below QR code.

The link to the survey will also be available on the IOC website and Glue Up.

## Institute of Carpenters Membership Survey - 2025



# ACCESS DISCOUNTED FUEL CARDS

Through NAS's partnership with Fuel Card Services, IOC members can now access discounted fuel cards. These cards are offered at a 50% discount by Fuel Card Services to NAS/IOC members.



## Why get a fuel card?

- Save money: Save up to 10p per litre on fuel.
- Cut Paperwork: HMRC-compliant invoices mean no more keeping receipts.
- Know what you are paying: Get fixed weekly price updates.
- Hassle-Free: Accepted at up to 90% of UK fuel stations.
- Stay Safe and Secure: Cash-free transactions help stop fraud.

Importantly, there is no contract. So if it is not working for you, you are free to stop at any time.

## To find out more

Visit, the Files section of the IOC Members Community (My Community) in Glue Up.



## DISCOUNTED AA FLEETWISE COVER

Institute of Carpenters members can now arrange Fleetwise cover via the AA using the agreement between the AA and the National Association of Shopfitters.

Discounted by 46%, the standard policy includes both Roadside Assistance (over 1/4 mile from the vehicle's registered address) and Home Start (within 1/4 mile of the vehicle's registered address) – so you are always covered.

The set discount is also available on optional extras, including Parts and Garage Cover and National Recovery (Relay).

For more information and to explore your options, visit:

<https://tinyurl.com/5czj5amj>

If you have any questions about using this benefit, please contact the team at: [enquiries@shopfitters.org](mailto:enquiries@shopfitters.org)



## PROFESSIONALLY QUALIFIED PERSON (PQP) – CONSTRUCTION SKILLS CERTIFICATION SCHEME (CSCS) CARD

As a benefit of IOC membership, those of you who have achieved Member or Fellow level can apply for a CSCS PQP card.

Simply let us know you would like to apply for the card by emailing us at [info@instituteofcarpenters.com](mailto:info@instituteofcarpenters.com).

We will then produce a letter confirming membership for you to upload, along with the link to the online application on the CSCS website<sup>1</sup>. The card is valid for 5 years or the duration of IOC membership.

Although owning a CSCS card is not a legal requirement for entering building site environments, most employers will demand that their employees have an appropriate card.



Source

1. All applicants must take and pass the CITB Managers and Professionals Health, Safety and Environment Test: <https://tinyurl.com/3tt6ztd4> or the alternative CIC Health and Safety Test: [www.cic.org.uk/training/health-safety-certification](http://www.cic.org.uk/training/health-safety-certification)

# CUTTING EDGE EDITORIAL COPY DEADLINES 2025



Edition	Editorial copy deadline
Summer	1 May
Autumn	31 July
Winter	31 October

Please submit text and images separately and provide images in as large a file size as possible, otherwise they may be of poor print quality. All content must be submitted by close of play on the copy deadline to: [info@instituteofcarpenters.com](mailto:info@instituteofcarpenters.com).

We cannot guarantee that content received after the copy deadline will be included in that edition. Any content not included, will be kept for a future edition of Cutting Edge. Wherever possible, we will try to incorporate all images supplied into your articles, however, due to the space available, this is not always possible.

Keep in touch on Facebook. Search for the Institute of Carpenters

<https://twitter.com/loCarpenters>

@IoCarpenters

Student Instagram account: wood-students-ioc



A competitor hard at work during the 2024 competition



The winners of the 2024 competition

# MERLANE TROPHY 2025

Taking place on Wednesday, 30 April, at Vision West Nottinghamshire College, the Merlane Trophy competition offers candidates from colleges across the UK the opportunity to showcase their skills in a four-hour practical test, all in an effort to win the coveted trophy.

The 46th Merlane Trophy is taking place on Wednesday 30 April at Vision West Nottinghamshire College – Construction Centre, Unit 1 Station Park, Julias Way, Kirkby-in-Ashfield, Nottinghamshire NG17 7RB.

The four-hour practical skills test commences at 10am, with doors opening an hour earlier for competitors and their support teams. Lunch will be at 2pm, followed by prizegiving at 3pm and proceedings wrapped up by 4pm.

This popular event was first launched in 1977 and has been running every year since, except during covid.

Originally, the competition was staged for East Midlands colleges and training centers before extending to include Sheffield College, South Yorkshire and Moulton College, near Northampton. To be more inclusive, this year

entry to the competition is being offered to any college or training center prepared to travel to the host venue, which is in Nottinghamshire.

Although bench-based, the skills test pieces cover either site-based carpentry or bench joinery, with the first task in each case being to prepare a setting-out rod. Details of the project are sent to the participating colleges one or two weeks beforehand, allowing candidates the opportunity to have a trial run if they wish. However, no templates or aids are permitted in the competition. The details also include a list of permitted and banned tools.

Each competitor receives a Certificate of Participation and a goody bag. The top three receive an additional certificate denoting first, second and third place, along with prizes kindly donated by our sponsors, a shield and cash prize.

With a policy of providing equal access and opportunity there is an additional special prize, known as the Ernie Leach Shield (named after its first sponsor), which is awarded to the competitor who approaches the project in the most methodical and workmanlike manner, demonstrates good safe working practices, including a clean working area and demonstrates proper choice, handling and care of their tools. Following the death of **Ernie Leach** a number of years ago, this special prize has been sponsored by various companies and individuals, with the candidate also receiving donated prizes, a shield, cash and certificate.

For more information visit:  
<https://instituteofcarpenters.com/merlane-trophy-2024>.

David R Winson MBA FIOC | East Midlands

## CARPENTERS' CRAFT COMPETITION 2024/25

Registration date:  
31 March

Send your final test piece for judging  
31 May

More information can be found by following the below links.

The candidate pack: <https://tinyurl.com/46senak5>

The competition overview and conditions: <https://tinyurl.com/45rbpbe8>

To register for the competition: <https://tinyurl.com/ycxua6bk>

If you have any questions regarding the competition, please contact us via email:  
[info@instituteofcarpenters.com](mailto:info@instituteofcarpenters.com) ◀



# RECOGNISING OUTSTANDING TALENT IN OUR SECTOR

A celebration of exceptional skill, dedication, and craftsmanship:  
Winners of the 2024 3rd Year Students' Award.



(L-R) Ryan Fosker being presented with his certificate from Geoff Rhodes, President of the IOC



(L-R) Geoff Rhodes presenting David Walker with his certificate



(L-R) Leo Tigwell being presented with his certificate from Geoff Rhodes

The Institute of Carpenters (IOC) is pleased to announce the winners of the 2024 3rd Year Students' Awards and the Robert Rampley Memorial Award for Outstanding Craftsmanship.

The annual competition is open to 3rd year/strong 2nd year students studying at our member colleges across the UK.



(L-R) Luke Jackson being presented with his certificate from a member of staff at Nelson & Colne College



(L-R) Adrian Salton, Tutor York College, Anthony Rampley and Helen Shaw.

**Overall Winner of the 3rd Year Students' Award and recipient of the Rainleaf Trophy – Ryan Fosker, West Suffolk College**

**Highly Commended in the 3rd Year Students' Award and Winner of the Robert Rampley Memorial Award – David Walker, York College**

**Highly Commended in the 3rd Year Students' Award – Leo Tigwell, Northampton College**

**Highly Commended in the 3rd Year Students' Award – Luke Jackson, Nelson & Colne College.**

Ryan Fosker, a 20-year-old West Suffolk College student and TMJ Interiors apprentice, received £550 in vouchers from industry leaders including Axminster Tools, Ironmongery Direct, Medite SMARTPLY, and Reisser UK Ltd, along with the Rainleaf Trophy, awarded annually to the overall winner and a certificate.

Reflecting on his achievement, Ryan said, "It is a privilege to receive this accolade. TMJ Interiors and West Suffolk College have both treated me like family, and they push me to be more than I think I am."

David Walker, an apprentice at York College and University Centre, won the Robert Rampley Memorial Prize for Craftsmanship. Along with a winners' certificate, David also received vouchers totalling more than £300 from Reisser UK, Axminster Tools, Ironmongery Direct, and MEDITE SMARTPLY, as well as a £100 bursary from the Rampley family.

Helen Shaw and Anthony Rampley were present to congratulate David as sponsors of the prize, which is named after their father, Robert. Robert worked as a joiner from

leaving school at the age of 13 until he passed away in his 70s.

On his recognition from the IOC, a delighted David said: "It feels fantastic. It was a nice surprise and a lovely way to mark the end of my apprenticeship."

"It is always nice to have a helping hand with tools, too, because they are not cheap, so I will be spending my vouchers wisely and getting some nice gear."

Congratulations also goes to Luke Jackson and Leo Tigwell who were also awarded highly commended certificates and voucher prizes totalling over £300 from Reisser UK, Axminster Tools, Ironmongery Direct and MEDITE SMARTPLY, in recognition of their hard work and passion for the trade.

**Geoff Rhodes**, President of the IOC said: "We are proud to recognise the outstanding talent of this year's 3rd Year Student Award winners and highly commended recipients. "These students represent the future of carpentry and joinery, demonstrating exceptional skill, dedication, and craftsmanship." ◀



# IOC & NAS MEMBERS' DAY

Join us for the 2025 IOC & NAS Members' Day –  
Shaping the Future of Competency in Our Industry.

**T**he day is set to be a pivotal event for professionals in shopfitting, carpentry, and joinery. This year, we are focusing on a topic that is shaping the future of our industry: The Competency Framework.

## Why this event matters

Following the Grenfell Tower tragedy, the Building Safety Act 2022 introduced new regulations, making workforce competence a legal and professional priority. But what does competence mean and how do we define it across different trades? These are the questions the IOC, NAS, and key partners like the British Woodworking Federation (BWF) have been addressing — and now, we are inviting you to join the discussion.

## What to expect on the day

**In-depth presentations:** Gain a clear understanding of the Competency Framework, including Skills, Knowledge, Experience, and Behaviours (SKEB), and how it applies across our sectors.

**Industry updates:** Hear from experts, including Amanda Scott, who is leading the alignment of the framework with National Occupational Standards (NOS).

**Consultation & feedback:** Your insights are essential as we finalise the framework. Be part of a collaborative discussion shaping the future of skills in our trades.

**Networking & collaboration:** Connect with industry leaders, fellow members, and key stakeholders to strengthen partnerships and build opportunities.

## Special guest speaker, Wayne Clarke:

Following excellent feedback from last year's event, we are delighted to welcome back Wayne Clarke, founder of the Global Growth Institute (GGI). Wayne is the creator of the World Class Manager course, designed to help build industry-leading management teams through 12 key habits of world-class leadership. With insights from thousands of managers across 500+ companies worldwide, Wayne's real-world, practical tools and strategies will be invaluable for members looking to enhance leadership skills within their teams.

## How to register

This free event is open to all IOC & NAS Members. Book your place here:  
[www.shopfitters.org/events](http://www.shopfitters.org/events) ◀

# TIMBER INDUSTRY CITY HUB

**T**he next Timber Industry City Hub will take place on Thursday, 27 March, from 10:30 am to 1:00 pm at Exeter College, Falcon House campus. All members are welcome.

To read more about the initiative visit: <https://instituteofcarpenters.com/timber-industry-college-hub-initiative-to-encourage-more-trainees-into-the-timber-industry/>





# AN INTERESTING AND CHALLENGING TIME LIES AHEAD FOR THE CITB AND ECITB

**James Filus**, Director, discusses the Construction Industry Training Board (CITB) Levy proposals for 2026–2029, leading into this year’s consensus (consultation) process, while they also address the recommendations identified in the Government’s recently published 2023 review of Industry Training Boards.

The review, led by **Mark Farmer**, renowned for the 2016 labour market review *Modernise or Die*, was commissioned to specifically examine the CITB and the Engineering Construction Industry Training Board (ECITB) — the last remaining Industry Training Boards. The review, titled *Transforming the Construction Workforce*<sup>1</sup>, is a substantial document at 211 pages. For those seeking a lighter read, a summary covering all 17 recommendations is just 37 pages.

The overall recommended direction from Mark Farmer is that the CITB and the ECITB should merge into one, single, workforce planning and development body for construction and engineering construction, which continues to be supported by statutory levy. The newly formed organisation should focus on competency to drive up productivity and quality, alongside the development of a digital skills passport to evidence and police competency.

This aligns with the overall direction of travel for the construction industry — as highlighted in our Winter 2024 edition of *Cutting Edge*, competence is a big-ticket item which the sector is grappling with, and both the Institute of Carpenters (IOC) and the National Association of Shopfitters (NAS) are deeply involved in addressing it.

Alongside this, we have seen a dramatic increase in the number of Construction Skills Certification Scheme (CSCS) cards being scanned each month (approximately 3 million in November and 2.9 million in December 2024), as the scheme continues to grow and be recognised as the de facto method for monitoring those working on construction

sites. It seems a natural evolution for the CSCS platform to eventually include the competence markers referenced by Mark Farmer, once those markers are defined by the industry.

The CITB has said it expects to take twelve months to scope the recommendations alongside the Department for Education, which does imply immediate change. In the meantime, it has begun the process of consulting on how the future plans will be funded through consensus<sup>2</sup>. The consensus process gives levy paying employers, primarily through prescribed organisations (which includes the NAS), alongside a sample of randomly selected levy payers, the opportunity to comment on the levy proposals. For 2026 to 2029, these are:

#### Levy rates to remain unchanged at:

- PAYE 0.35%
- Net paid (Taxable) CIS Sub-contractors: 1.25%

#### Thresholds to increase:

- Small business exemption threshold to increase to £150,000 (from £135,000)
- Small business reduction threshold to increase to £500,000 (from £450,000)

The proposed freeze on rates, alongside a small business exemption increase, will undoubtedly place additional pressure on the

organisation at a time that the Government’s review is calling for it to do more. However, it likely had little choice other than to hold the rate of levy, as overall support has been in decline for several years.

In the 2021 consensus process, the CITB secured approval from just 66% of employers liable to pay its levy and those representing 63% of the total levy value. This was a significant fall in support since the process in 2017, which received approval from more than 76% of employers liable to pay its levy and those representing more than 69% of the levy value. There was a risk that a continued downward trend would see support drop below 50%, which would be catastrophic for the CITB.

**Tim Balcon**, Chief Executive of the CITB responded to the review by stating: “We are addressing many of the areas identified within the report through our strategic plan. We are working with industry and all our partners to develop a training and skills system that works now and in the future. A system that supports industry in training its workforce and helps bring skilled and diverse workers into industry.” ◀

Source

1. [www.gov.uk/government/publications/2023-industry-training-board-itb-review](https://www.gov.uk/government/publications/2023-industry-training-board-itb-review)

2. [www.citb.co.uk/levy-grants-and-funding/industry-consultation-consensus/consensus-2025](https://www.citb.co.uk/levy-grants-and-funding/industry-consultation-consensus/consensus-2025)





# ON-SITE ASSESSMENT AND TRAINING (OSAT): AN ALTERNATIVE ROUTE TO APPRENTICESHIPS

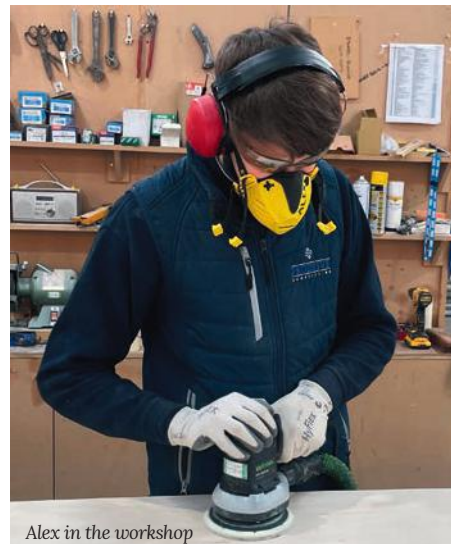
**Ann Downes**, Director and self-described Jack-of-All-Trades at Prodrive Shopfitting, spoke to **James Filus**, Director of IOC and NAS, and told him why they considered using On-Site Assessment and Training (OSAT) for two of their young employees, Mason and Alex, and shares their experience.

## About Mason and Alex

Mason joined Prodrive Shopfitting at 16 as a school leaver. He started an apprenticeship through a local, non IOC member college, but unfortunately, it was not successful. His dad works as part of the Prodrive Shopfitting site team, and Mason was eager to join him, but could not due to a lack of qualifications. Now 18, Mason is flourishing in his role.

Alex, who just turned 17, is also a school leaver with no prior experience. He was eager to join Prodrive Shopfitting as a Bench Joiner in the workshop. Although he will not be working on-site, both Alex and the business are committed to securing a recognised qualification to set him up for success. He is currently revising for his CITB Health, Safety, and Environment test.

Mason, Prodrive Shopfitting apprentice





### What was the motivation for exploring the OSAT route?

Everyone was disappointed with the alternatives on offer. As mentioned earlier, Mason had ended his apprenticeship prematurely because he was not enjoying it<sup>1</sup>. We all felt the local college's focus was on filling courses rather than providing quality, sector-relevant training for students. This longstanding concern was the reason we had not taken on any apprentices for some time. We wanted to invest in and support our young employees, and OSAT presented an alternative route<sup>2</sup>.

### How has the training been received for their roles?

On a day-to-day basis, Mason works alongside his dad and learns on the job. He is also supported by the Contracts Manager on-site.

Alex, has been paired with Steve, an experienced joiner in the workshop, who acts as his mentor. While the workshop's foreman Kenny, has overall responsibility, Steve is there to guide and support him.

### How does the OSAT work in practice?

The OSAT Assessor observes Mason and Alex at work, asks questions about how their work is completed, and records what has been demonstrated and discussed against the NVQ standard to build a portfolio of evidence. My role is to ensure that our Assessor, Adam, receives all the necessary information he needs. He has been approachable, and the process has been very smooth so far. It should take around 12 months to complete.

### Did you feel that the advice, guidance, in-depth support, and members-only offers provided by the NAS team supported your needs and resulted in a positive outcome for Prodrive Shopfitting?

Yes, very much so. The plan and new routeways for alternative training methods are good, and we are hopeful this will be successful for us.

### Did you feel the NAS team took the time to truly understand you and your company's needs and pain points?

Yes, it is always very important to build a good relationship, get to know one another, and feel comfortable moving on to the next level of training and development.

### Did Amanda from the NAS leave you feeling enabled to move forward and continue recruiting the next generation with a study and skills plan for the future?



We are hopeful that this approach will be successful to gain the necessary qualified skilled based team that is required within our business.

### What does it mean for Mason and Alex to be qualified?

It means a lot to both of them. First and foremost, they will gain a recognised qualification. We are also hopeful of offering them the opportunity to continue to Level 3 qualifications in the future, which will support their ongoing career development. It is all about climbing the ladder, and this is the first step. We want them to feel invested in and encourage them to be successful.

### What does it mean for Prodrive Shopfitting?

It is also positive for Prodrive Shopfitting. We are bringing in motivated young people who are interested in both the business and the trade. We hope they all stay and help future-proof the business, but if they do decide to leave, they will have valuable qualifications to take with them—which is important.

There was the added benefit that the NAS helped support us to find a quality Assessor through HSS Training, which was offered at a discounted rate thanks to the partnership

between both organisations. We are also able to recover costs through CITB grant funding.

### About Prodrive Shopfitting

Prodrive Shopfitting is in the North-East of England, Prodrive Shopfitting has a 10,000 sq./ft factory producing high-end furniture in-house; supported by an experienced and quality site fitting team that travels throughout the UK and Ireland. It works within a multitude of fit-out industries including leisure, office, dentistry, healthcare, restaurants, hotels, and world-renowned retail brands. To find out more visit: <https://prodriveshopfitting.co.uk>

### Would you like to know more about OSATs?

The NAS can help you, just as it helped Prodrive Shopfitting. Please reach out via email at: [enquiries@shopfitters.org](mailto:enquiries@shopfitters.org). ◀

Source

1. Statistics show that one in two apprenticeships fail and one-third of leavers cite the training provider.
2. [www.nocn.org.uk/data/News\\_Downloads/ConstructionAchievementRates.pdf](http://www.nocn.org.uk/data/News_Downloads/ConstructionAchievementRates.pdf)

# RESPONSIBLE WASTE DISPOSAL: WHAT YOU NEED TO KNOW

As waste regulations tighten and sustainability becomes an increasingly important focus for businesses at every level. **Denise Tabone**, Administration Manager, caught up with **Matt Harris**, Business Development Consultant at LITTA, to ask him what tradespeople, including carpenters and joiners, need to know about responsible waste disposal.

Since its launch in 2017, LITTA has focused on the waste collection industry with its tech-driven, on-demand service. With £4 million in venture funding, over 150,000 collections completed, and a growing network of more than 300 partners, LITTA strives to make waste collection faster, easier, and more sustainable.

From launching its first mobile app to hitting major growth milestones, LITTA continues to innovate, using technology to drive automation and efficiency.

Here is what Matt had to say in response to Denise's questions.

## What are the biggest challenges carpenters and joiners face regarding waste disposal?

The challenges are varied. They include over-ordering materials, producing different types of wood waste and little on-site waste segregation. As a result, they often face high disposal costs and limited recycling options, making waste management challenging. Understanding responsible disposal practices and ensuring sustainability while maintaining efficiency can also be difficult.

## How can tradespeople ensure they dispose of timber and wood waste in an environmentally responsible way?

Quick wins include separating waste streams for recycling, using licensed waste carriers, and reducing waste through careful planning and efficient material use. Staying up-to-date with waste regulations and using dedicated wood-only skips on larger projects further improves recycling efforts.

## Are there any common misconceptions about waste disposal?

Common misconceptions include the belief that all wood is recyclable, hiring a skip is the cheapest option, and that compliance documentation is not required when disposing of waste. In reality, responsible

waste disposal supports sustainability, can be cost-effective, and helps businesses and tradespeople stay organised.

## What are the legal obligations of carpenters and joiners when it comes to waste disposal?

Their legal obligations include a duty of care to dispose of waste responsibly, storing waste safely and securely on-site and using licenced waste carriers to ensure that waste is disposed of responsibly. One of the most important obligations requires receiving a Waste Transfer Note for each load that leaves the site they're working on, detailing the type and quantity of waste.

## How does LITTA help businesses stay compliant with waste disposal regulations?

LITTA ensures responsible disposal by working with trusted and licenced waste carriers, providing digital Waste Transfer Notes and real-time waste tracking. LITTA also provides monthly waste reporting, identifying different waste streams that have been collected and how they have been processed.

## What steps can professionals take to reduce waste on-site?

Carpenters and Joiners can reduce waste by planning material use efficiently, sourcing and choosing sustainable materials, repurposing or recycling scrap wood and using digital tools to manage materials more effectively.

## What happens to the waste that LITTA collects—can any materials be recycled or repurposed?

All waste collected by LITTA is taken to the most appropriate waste collection site, where it is either recycled, repurposed, or ethically disposed of in line with sustainability best practices. Where possible, materials such as untreated wood, metals, and plastics are recycled, while non-recyclable waste

is handled in the most responsible way to minimise environmental impact.

## What advice do you have for small businesses or independent tradespeople looking to manage waste removal more efficiently?

Small businesses can improve waste disposal by scheduling regular collections, using on-demand services like LITTA instead of traditional skips, keeping proper waste disposal records, separating materials for easier recycling, and taking advantage of working with ethical waste disposal companies with dedicated account manager tailoring support to their requirements.

## Are there specific types of wood or materials that require special handling or disposal methods?

Certain materials require specific handling, such as treated or painted wood, MDF, plywood, and hazardous adhesives, as they may not be suitable for traditional recycling and often need alternative disposal methods.

## What innovations in waste management do you see shaping the future of the industry, and how is LITTA preparing for these changes?

The future of waste management includes AI-driven tracking, circular economy initiatives for material reuse, increased use of wood waste for sustainable biomass energy, app-based waste management for greater efficiency, and incentive programmes encouraging responsible disposal.



**LITTA**<sup>TM</sup>

SUSTAINABLE JUNK REMOVAL

To find out more you can visit:  
[www.litta.co.uk](http://www.litta.co.uk)



The amazing team at Atelier Desmonts  
under one of the principal frames of  
the nave of NDP. pc Loïc Desmonts



# THE REWARDING LIFE OF AN ARTISAN:

## CRAFTING NEW BUILDS INSPIRED BY HISTORICAL EXAMPLES LIKE NOTRE-DAME DE PARIS (NDP)

Having witnessed the reopening of Notre-Dame de Paris (NDP) in December 2024, the IOC, recently caught up with **Mike Dennis** to discuss his journey into carpentry and joinery, as well as his involvement in restoring NDP to its former glory. ►



## INDUSTRY INTERVIEW

**M**ike is one of a tiny number of artisans in the world capable of replicating the 800-year-old latticework over the cathedral's nave. He worked with blacksmiths who supplied him with custom-made replicas of 13th-century tools and used ancient techniques to assist in the rebuilding of the cathedral.

The IOC was particularly intrigued by the process Mike follows and the tools he uses on his projects, including the restoration of NDP. Below is what he shared.

### How did you become involved in Carpentry and Joinery?

When I started traditional oak framing around 2008, it was a very difficult trade to get into. I was fortunate to secure a place on a timber framing course taught by Alan Ritchie in Wales. I must have done something right, as that week turned into a traditional apprenticeship, where I crafted frames by day and worked on technical drawing with travelling Aussie carpenter Chris Nance in the evenings.

After a short while, I was fortunate to receive funding from the Heritage Lottery Fund. Without that generous bursary and



tool allowance, I probably would not have been able to continue my journey. This funding set me on the path to completing specialist NVQs, and a few years later, I earned a Master's Certificate Scheme (MSc)

in Timber Building Conservation at the Weald and Downland Living Museum.

### Can you tell us about your workshop and the specialist tools you use?

Much of my career has involved creating new builds inspired by historical examples. Unlike smaller repairs, which are often done on-site with minimal disturbance to the original historical fabric, restorations like NDP were undertaken in a manner similar to a new build. This essentially involves working in a large workshop or even open air before the structure is transported to the site.

Apart from the obligatory power tools that make the job more cost-efficient and easier on the body, many of my tools could be considered antiques. Some, like the medieval or Viking-age axes, were crafted by incredibly skilled toolsmiths.

### What interesting projects have you been involved with including NDP?

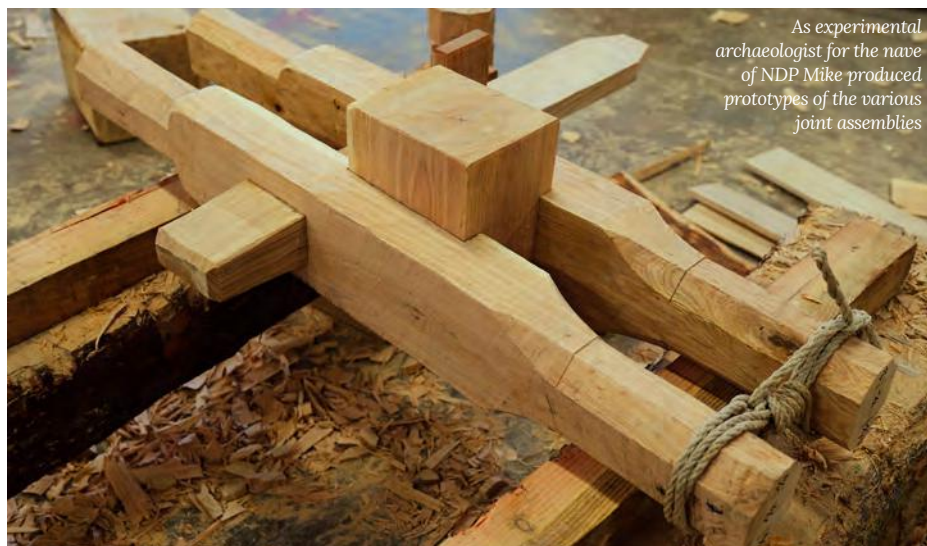
Highlights have included the Kinsol Trestle Bridge on Vancouver Island, where I spent about a year dangling from a rope, replacing old timbers. Then there was Guizhou, China, where a group of European carpenters from Carpenters Without Borders (CWB) worked alongside their Chinese counterparts to build the frame of a cultural centre.

There is great pleasure to be had in seeing something that you have helped make give so much to a community and the same can be said with NDP. Not only do you get to meet some incredible craftspeople, but the project touched the



The topping out Ceremony Nave NDP



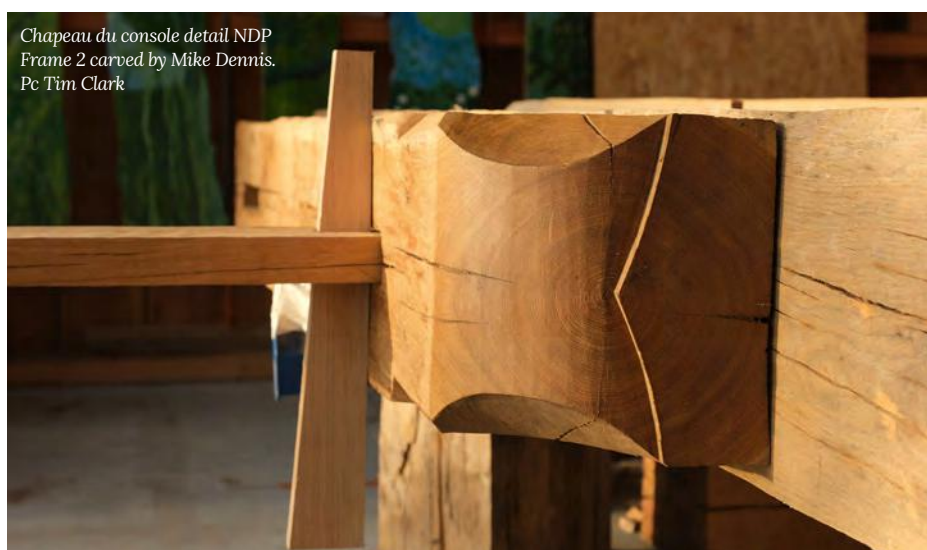


As experimental archaeologist for the nave of NDP Mike produced prototypes of the various joint assemblies

hearts of people from around the globe. I hope that this was a project that not only inspires a future generation of craftspeople, but demonstrates what we are capable of building when we work together. In the face of the climate emergency, it also shows that we can build with natural materials adaptable structures that can endure for centuries or even millennia.

### What is the most suitable timber and how it is sourced?

In the case of NDP, the original 13th Century frame in the nave was oak and framed whilst still green. The biggest challenge we had in sourcing the timber was not the sheer number of trees required (over 1,000 just for the nave), but the difference between modern and medieval forest management – with the benefit of modern machinery and the requirements of industries such as barrel making, large diameter trees are preferred, whereas the medieval cathedral carpenter required trees that were tall, straight and of just the right section. The trees were converted through hewing with axes, taking off the minimum amount of material to create a boxed heart timber. Despite this challenge, Ateliers Desmonts (who I was fortunate to work for), worked alongside the foresters of the Office National des Forêts (ONF) to source almost all the trees within a two-hour drive of the workshop. I must stress that unlike the clear felling that one often sees, the ONF had the future health of the forest in mind. There were times where we might find the perfect tree, but it was deemed detrimental to remove it and was left standing.



Chapeau du console detail NDP  
Frame 2 carved by Mike Dennis.  
Pc Tim Clark



Mike at the Kinsol Trestle  
Bridge on Vancouver Island



Mike and the Carpenters Without Borders,  
preparing to raise a frame Guizhou, China

### For anyone wanting to get involved in conservation and restoration work what is the best way to start?

I would encourage them to find a course. Despite there being more work opportunities than a few decades ago, it can still be a challenge. This is where volunteering with heritage projects is invaluable. In timber framing for example, the main organisation is the Carpenter's

Fellowship (CF) which frequently hosts events where you can not only learn new skills such as hewing but also make contacts in the industry that lead to a job. It was my involvement with the CF that led me, via projects with CWB, to be involved with NDP.

For anyone who needs someone to talk through their options, I am always happy to lend an ear via my Instagram: [@mike\\_dennis\\_craft](#). ◀



# MATERIAL SCIENCE AND THE WOODWORKER

## Part 29: Steel and Iron – Carbon part 2

The late **Brian K. Hodgson** continues to focus on the study of carbon, especially the isotope Carbon-14<sup>1</sup> (<sup>14</sup>C) and look at the principles of Carbon-Dating.

### An introduction to Carbon-14

Carbon-14 is a radioactive isotope of carbon that is formed naturally in the upper atmosphere by cosmic rays and can replace Carbon-12 in biological systems. <sup>14</sup>C only occurs as a trace element, about 1 to 1.5 atoms per 1,000,000,000,000 atoms.

The concept was first developed by Willard Libby in the late 1940s, and he was awarded the Nobel Prize in Chemistry for this in 1960. It became widely used for research into archaeology for dating organic matter such as human and animal remains, natural fabrics, leather goods, and vegetable matter.

### The Beginning of Earth and Carbon-14

Earth was at its inception following a nuclear event, this action can still be seen on the surface

of the Sun through telescopes with a filter fitted. Activity continues in the form of flares.

If the accretion theory<sup>2</sup> is true, these eruptions from the Sun over millions of years became larger meteors, then planets containing nitrogen, carbon and other minerals, plus metals like iron, aluminium and water. Our planet developed with an almost entire surface of water and as the earth cooled crystals grew forming a dry crust. About 750 million BP (Before Present), chimneys formed through the surface of the seabed, allowing some of the hot gases to escape from deep into the earth releasing more CO<sub>2</sub> and nitrogen to form our atmosphere; still without oxygen. Later, lower forms of life developed that used CO<sub>2</sub> and sunlight to photosynthesise, causing

some of the oxygen bound up in the CO<sub>2</sub> to become free oxygen and the carbon locked into the rocks.

We have looked at the proportion of Carbon in the atmosphere and how this has changed over the last 200-250 years – the ancient forests were banks holding carbon safely locked up.

Not counting written evidence, there were previously three methods of determining the date of buildings and artefacts in the middle of the 20th century:

- Style and practices: This was dependent on knowledge of how things were made and the type of decoration applied to them at various periods of history. It was a skill developed over time and experience by the practitioner.





- Carbon-14 dating: As mentioned above, this depended on the fact of the existence of an unstable isotope, the degree of the deterioration of the isotope calculated on an accurate assessment of the proportion of isotope  $^{14}\text{C}$  to the total of all isotopes ( $^{12}\text{C} + ^{13}\text{C} = ^{14}\text{C}$ ).
- Dendrochronology: Based on tree growth rings, a much more complex process which entails comparison with certain test samples from different regions of the world.

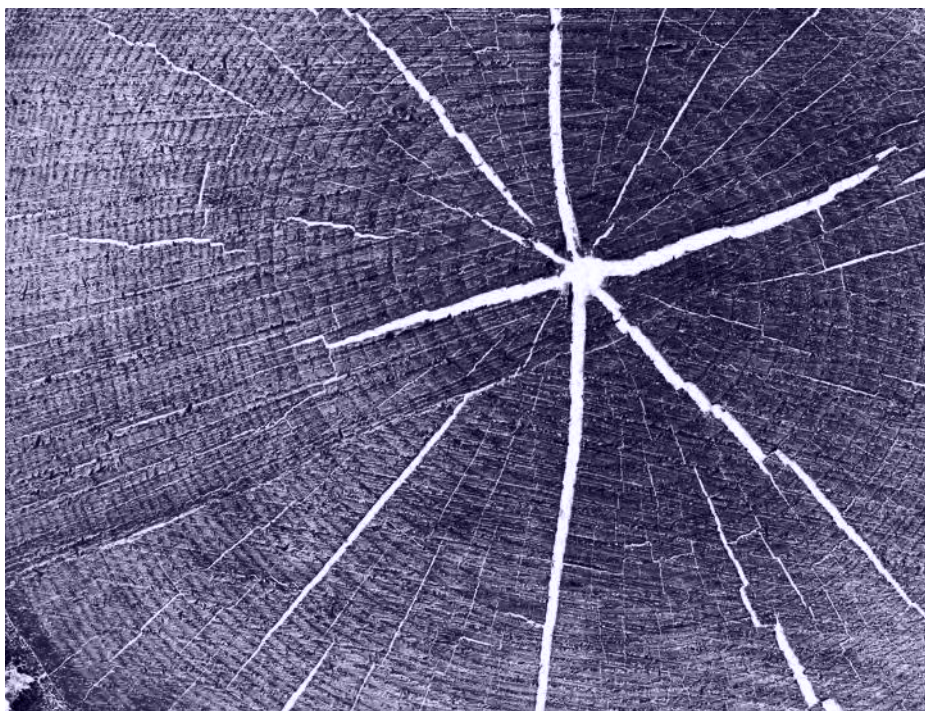
Although this critical proportion of  $^{14}\text{C}$  compared to the rest of the Carbon isotopes was assumed to be a standard figure, we now know it has greatly varied through time and in recent years has been increased because of human activity, including the detonation of atomic bombs and accidents at nuclear power stations such as Long Island, USA and Chernobyl, Ukraine. These activities have affected the whole atmosphere and can be recorded in iron and steel. Iron and steel made before the mid-twentieth century contains a level of  $^{14}\text{C}$  in its carbon fairly consistent over hundreds of years; that made after the mid-1940s shows the beginning of a build-up of  $^{14}\text{C}$  to a much higher level.

This, together with the amount of carbon in the atmosphere, can be seen to be altered by the actions of humans; something global warming deniers can see from the readings of carbon data that humans can affect the atmosphere globally. Iron and Steel is more radioactive if made after 1945.

### Variations in the proportion of carbon in iron and steel

The variations of carbon and other minerals and metals in an iron alloy greatly affects its properties, making it suitable for different tasks and exposures, such as:

- Resistance to compression or squashing
- Resistance to tension or stretching
- Resistant to corrosion
- Electrolytic activity (metals when in a certain wet or moist environment can gain or lose electrolytes to/from another metal)
- Hardness
- The ability to stand repetitive stresses
- The ability to be drawn into longer thinner pieces by stretching or to be made into different shapes under tensile or stretching forces
- Malleability, the ability to be pressed into different shapes under compression or squashing forces.
- Torsion forces, the forces that apply a twisting affect, like turning on an old tap, or tightening a nut



- Shear forces, the forces that can cause a section under local stress to pull out, sliding along the rest of the material. This is a weakness in a non-metal with directional grain such as wood
- Bendability
- Temperature induced change in size
- Movement of the material under prolonged loading
- Conducting heat
- Conducting electricity
- Thermal insulation
- Acoustic insulation
- Paintability
- Castability

### The strain and stress of compression and tension

The terms strain, stress, compression, and tension are key to understanding any material, and important in dealing with iron and steel as these metals are man-made and tailored to produce the appropriate properties for the job they are intended for. These four terms deal with the main properties of these metals, although they may be masked if another property takes central stage, such as corrosion resistance.

- Stress: This is any force applied to a material or structure irrespective of whether it is a compression, tensile, torque or shear force
- Strain: This applies to the material or structure's response to the force. It may be a visible response –shortening, lengthening or twisting, but more often is a force in the material responding by putting it under compression or tension

- Compression: Compressive stress applies a tendency to shorten or squash the material or structure
- Tension: Tensile stress applies a tendency to lengthen or stretch the material or structure.

### Compression and tension in other guises

When material twists, bends or a curved surface is flattened, compressive and tensile forces are set up in the material, as are electrolytic energies.

### Conclusion

These different types of behaviour help decide whether iron or steel is the appropriate choice of material for the task in hand.

In the next part we will look more at the forces working on the metal in use, as well as the crystalline structure of irons and steel and trace how we began to make the metal we wanted. We will then look at special steel for springs, saws and other tools and tooling and the limitations of using steel for cutting edges. ◀

**Brian K Hodgson, Ph.D, FIMMM, FFB, FIOC, MIMWoodT, AMICT | Lancaster (deceased)**

Source

1. [https://en.wikipedia.org/wiki/Radiocarbon\\_dating](https://en.wikipedia.org/wiki/Radiocarbon_dating)
2. AI Overview: Accretion theory explains how gravity causes particles to gradually accumulate and form larger masses. It is a fundamental process that is responsible for the formation of galaxies, stars, planets, and more.

# THE TECHNIQUES OF STEREOTOMY - PART 3

“As I discussed in Part 1, the use of complex geometry in construction methods, known as stereotomy, has shaped cultural identities for centuries. In Part 2, I explored the rich tradition of stereotomy within German and French architectural practices. Finally, in this third and concluding part, I will focus on Japanese architectural practices, which also boast a rich tradition of stereotomy,” said **Patrick Moore**.

## JAPAN

In Japan, Kikujutsu is a meticulous technique employed by carpenters in wooden construction to precisely determine angles using a square ruler or straight edge and has been considered a closely guarded architectural skill (trade secret), transmitted among craftspeople through experience and oral tradition. Its roots trace back over a millennium, with some crediting its introduction to Prince Shōtoku. Initially passed down through oral tradition, Kikujutsu evolved alongside various academic disciplines during the Edo period, eventually becoming an established technique. The technique was systematised during the Edo period, particularly by Ōmune Nobutoshi, a chief

architect of the Edo Shogunate. Its scope extends beyond mere component processing to encompass dimensions, proportions, and layout criteria, making it an integral part of traditional Japanese architecture.

The mastery of Kikujutsu demands significant apprenticeship, rendering it a skill often overlooked in today's housing market.

Kiku-jutsu, derived from the Japanese words for measuring (ki), 90 degrees (ku), and art or way (jutsu), represents the meticulous techniques employed by master carpenters. Miyadaiku, or Japanese temple carpenters, utilise Kiku-jutsu to define the unique characteristics of Japanese architecture, evident in structures like pagodas and temples adorned with curved eaves and

intricate joinery. This discipline, introduced to Japan by Chinese Buddhist temple carpenters in 458, flourished during Prince Shotoku's era in the Asuka Period (590 AD) and reached its pinnacle in the Kamakura Period (1333 AD).

Traditional construction methods in Japan have evolved over centuries to harmonise with each region's natural environment. From wooden houses to intricate tea rooms and shrines, Japanese architecture often features gently sloping eaves and roofs, leaving a lasting impression. Passed down through generations, Kikujutsu, also known as “Sashikine,” guides the angles and assemblies of these architectural details. Its practitioners are revered artisans, passing down their skills from generation to generation.



## MASTERS OF STEREOTOMY!!!

Jérémie constructed a classic Guitarde respecting all the Rules in the Art of Assembly, the first ever to be constructed in the Americas (then shipped to Japan).

A representative of the School of Practical Stereotomy - École Pratique de Stéréotomie, said: “Congratulations Jérémie!! All your hard work and dedication has finally paid off. What an amazing piece!!”

Luc constructed a concave cone where the center is offset creating a seemingly inflated semi-circle. The front curved roof surface has a large three-dimensionally curved tapered St. Andrew's Cross with double curved purlins flanking either side. The cone has been sectioned multiple times to create the sloping ridges, six diversified (rotated) curved hips (where two adjacent

faces of the piece follow both roof surfaces), three regular hips, and three regular valleys.

Since Luc constructed his masterpiece in France, it was shipped to the school for final assembly with Jérémie's Guitarde. Despite the fact that both students were thousands of kilometers away from each other, the geometry was perfect and assembled seamlessly.

The representative also congratulated Luc, saying: “You did such an amazing piece! I can't congratulate you enough for your outstanding design and quality of work. A true craftsman!”

“Luc's masterpiece, along with Jérémie's, will become part of the museum's permanent collection once the traveling exhibition is over. Thank you so much Luc for all your hard work!”



The technique also involves skillfully crafting joints in vertical, horizontal, and diagonal orientations. Through Kikujutsu, the elegant curves seen in roofs and outward radiating rafters of temples, shrines, castles, and pre-modern residences were achieved. However, mastering Kikujutsu requires extensive training and experience, leading to a decline in proficiency among carpenters in traditional Japanese post-and-beam construction, particularly in contemporary single-family housing markets where simpler Western construction techniques prevail.

Despite this, temple and shrine carpenters, entrusted with the construction and restoration of culturally significant buildings, preserve the true essence of Kikujutsu. These artisans, including Master Carpenter Takeo Mochida, a Living National Treasure, and Tsuchida Toshio, ensure its continuity by imparting their knowledge to the next generation.

In contemporary Japan, where prefabricated construction methods and industrial production prevail, there is a growing concern about the diminishing craftsmanship. Yet, dedicated artisans continue to practice Kikujutsu, recognising the importance of wood's intrinsic qualities and their role in preserving Japan's architectural heritage. The restoration of old temples and shrines serves as a testament to the enduring legacy of Kikujutsu in contemporary Japan.

### Methods of Kikujutsu

- Keiyagen no hō (Method of radial curves)
- Kanagari no hō (Method of umbrella curves)
- Matsuba no hō (Method of pine needle curves)
- Heihō (Method of square roots)
- Sashikine sanpō (Three methods of sashikine)
- Santei hō (Method of calculating volume)
- Kinomi kaeshi hō (Method of reversing wood)
- Kobira okoshi hō (Method of raising eaves)
- Nage no kujihō (Method of throwing squares)
- Kinji hō (Approximation method)

Today, with the prevalence of prefabricated construction methods and industrial production, there is a growing concern about the lack of fine craftsmanship. Despite the prevalence of prefabricated construction methods and industrial production, dedicated Japanese artisans continue to practice Kikujutsu, ensuring its continuity and preserving Japan's architectural heritage. Traditional wooden structures crafted using Kikujutsu serve as cultural symbols in contemporary Japan, with the restoration of old temples and shrines highlighting its enduring importance.

### Summary: Germany, France, and Japan

Each country boasts rich traditions of stereotomy, reflecting unique approaches to architectural craftsmanship. In Germany, the practice known as Schiftung emphasises the spatial arrangement of wooden parts, crucial in timber construction, while France's l'art du trait focuses on achieving

precision and harmony through an intuitive approach to design. Japan's Kikujutsu stands as a meticulously crafted technique employed by carpenters to define the unique characteristics of Japanese architecture, from curved eaves to intricate joinery.

Despite the prevalence of prefabricated construction methods and industrial production globally, dedicated master artisans in each of these nations continue to uphold and practice their respective techniques, recognising the importance of preserving cultural heritage. Whether it is through the meticulous assembly of wooden parts in Germany, the intuitive visualisation of complex structures in France, or the precise craftsmanship of traditional Japanese carpentry, these techniques serve as a testament to the enduring legacy of stereotomy in modern-day construction.

As societies strive to balance technological advancements with the preservation of traditional craftsmanship and cultural architectural design, the continued practice of stereotomy ensures that these rich cultural traditions remain integral to architectural heritage worldwide. ◀

Patrick Moore FIOC | Canada



The amazing and wonderful stereotomical masterpiece by Jérémie Abbate, of Abbate Charpentier Traditionnel and Luc Adam, is on display in the Takenaka Carpentry Tools Museum's (竹中大工道具館) traveling exhibition Kigumi - Revealing the Carpentry Behind the Wood Joint. The exhibition is currently on display at the Toyota Commemorative Museum of Industry and Technology in Nagoya, Japan.



Impressive MHF projects using MEDITE products Pc Simon Punter

# MARTIN HOWLETT FURNITURE USES MEDITE MR TO CREATE STUNNING PROJECTS

**Martin Howlett**, Director of Martin Howlett Furniture (MHF), explains why MEDITE MR is the ideal material for a wide range of his bespoke furniture projects, consistently helping to save both time and costs.

Having first used MEDITE products while in college, Martin is well-versed in working with MEDITE's MDF panels to bring his beautiful projects to life. He has continued to use them throughout his 25-year career, where he has hand-made and installed high-end bespoke furniture for clients mainly in Sussex and Surrey. His main projects include creating cabinets, wine rooms, and media walls – all part of his customers' dream spaces.

Martin explained that thanks to the product's ability to deliver the consistently

high-quality results that a master furniture maker needs, he has chosen to use MEDITE MR for a wide range of products including shaker door production, carcasses, shelves, mouldings and even skirting for free-standing furniture. The projects were created using a range of thicknesses of MEDITE SMARTPLY's moisture-resistant MDF panels, including MEDITE MR 6mm, 12mm, 18mm, 25mm and 30mm.

Martin recalled that although he has tried products from a range of various brands for his projects, he always returns to MEDITE. He said: "I always come back

to MEDITE because its spray finish is so consistent, and this has not happened with other products I have tried. MEDITE MR does not absorb paint like similar products I have used in the past."

Martin estimates that using MEDITE MR requires around 50 percent less paint, noting that it only needs three coats of primer and two top coats of paint. He also highlighted that when applying paint to the panels, the finish is completely smooth and free of imperfections, which has not been the case with other MDF products he has tried.



"When customers expect nothing less than perfection every time, I need a material that consistently delivers the best possible results. This is why I choose MEDITE — in fact, customers often ask me how the finish looks so good!

"I tell them that achieving the desired finish with MEDITE MR is all about the process. It machines really well with table saws and hand power tools, and sands up perfectly, enabling superior finishes when the panels are sprayed with paint," says Martin.

Martin explained that he also prefers using MDF panels in some applications rather than solid timber panels as he believes they work better in a lot of cases. He said: "With solid timber panels, you run the risk of experiencing substantial shrinkage either during the building process or after installation, which risks a call back from an unhappy customer, but with MEDITE MDF, that does not happen since the panels do not shrink as much."

Martin concluded by saying: "From start to finish, including drawing, cutting, spraying and installation, my projects usually take around three to four weeks to complete.

"MEDITE MR has saved me time at all stages of the process thanks to the panels' consistency and ability to take but not absorb paint once applied.



"Furthermore, the guarantee that the panels will be the exact thickness I need means that I do not have to make allowances

for error margins when drawing in the workshop, saving me time and making the entire creation process easier." ◀

### Find out more

MEDITE MR and its applications, visit: <https://mdfosb.com/en/products/medite-mr>

Martin Howlett Furniture, visit: [www.instagram.com/martinhowlettfurniture](https://www.instagram.com/martinhowlettfurniture)

[www.facebook.com/cabinetmakersussex](https://www.facebook.com/cabinetmakersussex)



L-R) Amanda Scott, Skills Lead & UK Training Manager at NAS, Johannes Niedermeyer, Director at TCE and Geoff Rhodes, President of IOC



Amanda Scott, Peter Aicher, President of TCE and Geoff Rhodes



# A REWARDING VISIT TO TIMBER CONSTRUCTION EUROPE (TCE)

**Geoff Rhodes**, President of IOC and **Amanda Scott**, Skills Lead & UK Training Manager at NAS, attended and gave a presentation at the Timber Construction Europe (TCE) General Assembly in December 2024. Geoff shares his thoughts on their visit with us.

The aim of the TCE is to promote timber construction, skills, and timber architecture in Europe, while making a meaningful and sustainable contribution to the building industry becoming more ecological, particularly with regard to energy consumption and resource use.

Their Annual Committee Meeting and General Assembly took place on 3 December 2024 at the Congress Centrum in Innsbruck, Austria.

The IOC has been a reciprocal member of TCE since 2022 and was invited to attend the

December 2024 General Assembly to deliver an overview presentation covering the UK situation, both economically and in relation to the skills agenda, as well as current plans to develop more woodworking-related apprenticeships. This was delivered jointly on the day by Amanda and me.

Various initiatives are being worked on by our European friends within TCE, including ambitious plans that may involve student exchanges and work experience opportunities. With the IOC network of colleges continually expanding, the IOC

is well-placed to make the appropriate introductions when the time is right.

Valuable international contacts were made during this visit, and looking ahead, these connections will enable the IOC and NAS to capture best practices and experiences from other European nations for the benefit of all.

**Johannes Niedermeyer**, Director, and **Peter Aicher**, President of TCE, gave us both a warm welcome, and this relationship will be developed further. ◀



**James Filus**, Director, posted on Glue Up that one of the benefits of the platform is that it creates an online space for IOC members to share their experiences. He suggested starting the conversation by encouraging members to share examples of the work they are proud of. Below are some of these excellent posts.



**Liam Sibley**, Sole Trader at Skye Carpentry, shared an excellent starlight ceiling he created for an extremely happy customer. Liam's post also received the accolade of "Post of the Month" on Glue Up, earning himself a £20.00 e-voucher. Congratulations!



**Julian Nudds**, Owner and Master Joiner at JN Conservation, shared a traditionally styled orangery made from solid Accoya, featuring handmade sash windows installed for one of his regular clients. This project also included a fiberglass flat roof and a large roof light to ensure natural light floods into the room.





## MEMBERS NEWS

New IOC member **Ben Haskins**, Carpenter and Joiner at Haskins Woodworks, shared on Glue Up details about the biggest project he has undertaken to date: framing 88 bays (4m x 2m) between oak beams on top of the original rafters to create an entire ceiling. The project took nearly a year to complete, and impressively, it was undertaken during his apprenticeship.

Ben said: "It is not every day you can do an apprenticeship in a barn conversion." He also expressed his excitement about joining the IOC, stating that he has always wanted to be a part of the institute since he started his Level 2 at college.



**Jeremy Murphy**, Director/Owner at Kingsrock Joinery Products Limited, shared a project in central London where he supplied all the sash windows and casements.

Additionally, he has a challenging project coming up where he needs to sandwich the ornate glass inside sealed units and reglaze it into the existing sashes.





**Andrew Pardner**, Director/Master Joiner at Rustic Rural Ltd, commented on a recent project involving a 5.5m run of bespoke wardrobes. He said: "I absolutely loved this project! All of the doors and drawers were soft close. Of course, the drawers are on full extension runners and are all dovetailed! The clients were extremely happy, as am I!"



To see more, visit your Glue Up home page.

If however, you have not yet registered and wish to do so, please use the QR code below or go to <https://app.glueup.com/register/account>. You will need to use the email linked to your membership account.



## BOXING HARES: FROM BENCH TO TABLE

**Stephen Wiles** shared with us photos of boxing hares he carved for his late mum for Mother's Day; when he created the piece, it was also close to Easter. His mother had previously talked about hares boxing during the mating season in the farmer's field when she was a little girl during the war. He thought it would be a special gesture to make her some.

### About the piece

Stephen said: "I found the design of the boxing hares from a Google silhouette. I would usually adapt the design, but on this occasion, I kept it the same. I did, however, check that there was no copyright."

"I could see this design would require some delicate, unsupported grain of wood,

particularly on the ears and paws, which could easily snap if dropped. So, I chose to use ash, hoping the denser wood grain might be a bit more resistant to knocks. However, the only piece I had in stock was 17mm wide and not very stable. I typically like to use at least 20mm deep pieces of wood, so the carvings do not easily fall over when displayed. I still wanted to stick with the ash stock I had and did what most of us tend to do: adapt!

"I doubled the width of the base by doweling an additional piece, hoping it would provide more stability and act as a counterbalance. Not what I originally intended, but it works, and the delicate carving seems to lend itself to the thinness."



IOC President **Geoff Rhodes** has recently written an article for Timber Trades Journal (TTJ), discussing the critical need for a skilled and knowledgeable workforce.

To read the article, visit: <https://tinyurl.com/mrkhd743>

# Credit and Rewards? Xtraordinary!



Unique **TradeXtra Account** offering up to £10,000 instant credit\*, discounts and a loyalty programme exclusively for the trade!

**NEW**

**IronmongeryDirect**  
**TradeXtra**

Apply today at [ironmongerydirect.co.uk/tradextra](https://ironmongerydirect.co.uk/tradextra)

Find out  
more here



\*Subject to credit checks. If eligible, you'll be guaranteed up to £10,000 credit. Credit given will be the value of the credit score, capped at £10,000. Subject to Terms & Conditions. Exclusions apply.