TIMBER IN CONSTRUCTION

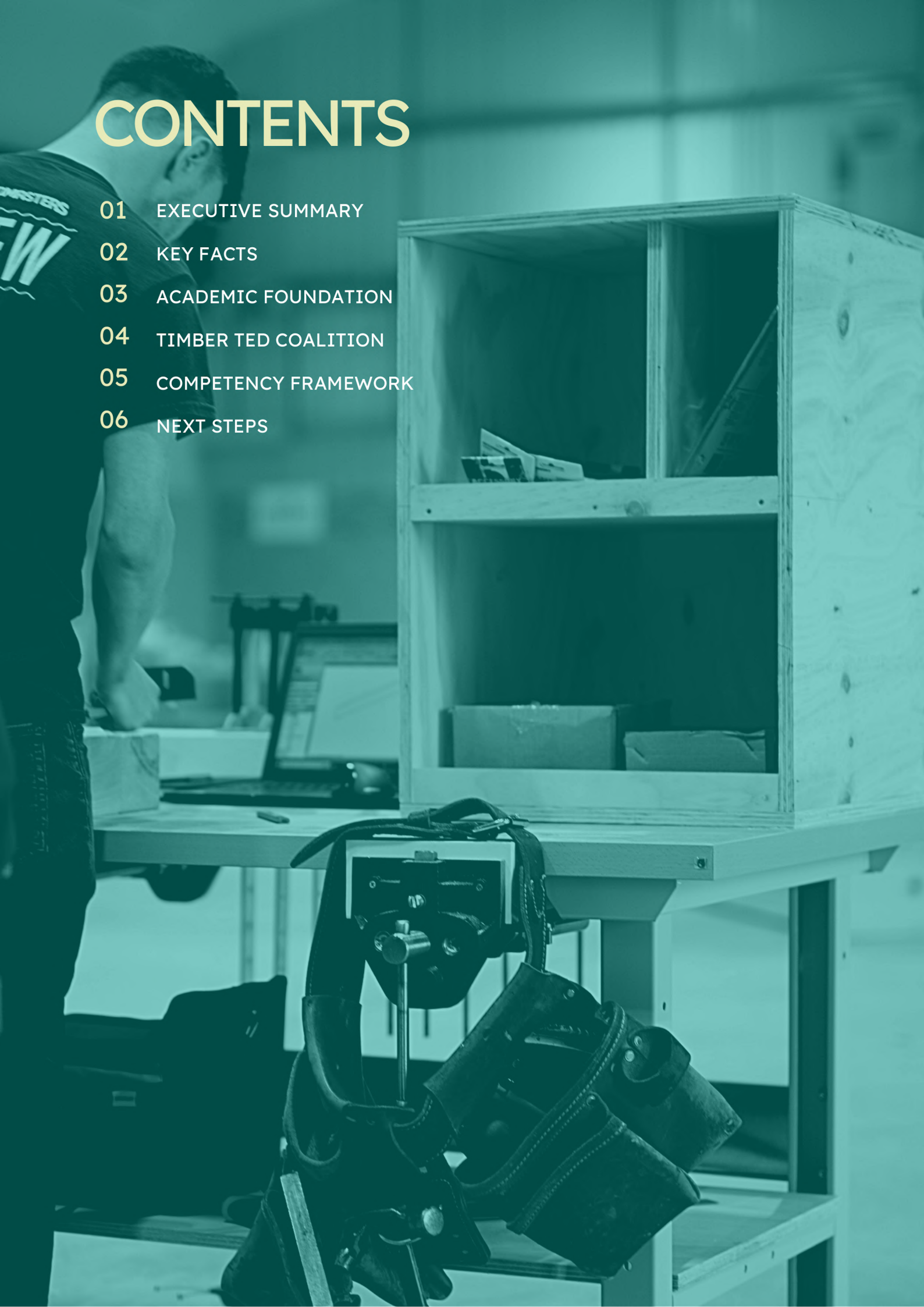
SKILLS ACTION PLAN

TIMBER DEVELOPMENT UK

MARCH 2023


MERCHANT
ARCHITECT
ENGINEER
MANUFACTURER
INSTALLER
CONTRACTOR
SAWMILLER
IMPORTER

CONTENTS



01

EXECUTIVE SUMMARY

David Hopkins
CE Timber Development UK

The UK needs to increase the use of timber in construction to achieve its Net Zero targets. But strengthening timber supply chains and boosting use of homegrown timber needs a workforce able to make best use of this renewable resource.

UK construction employs 3.1 million people, yet the skills crisis means the industry needs at least 350,000 more full time workers over the next decade to deliver ambitions for the built environment.

At present, too few built environment professionals – from Architects and Specifiers, to Engineers and Operatives – have the skills, knowledge and confidence to incorporate timber in building designs, especially for new build housing in England.

To address this critical skills gap, Timber Development UK has built a coalition across industry, academia and funders, creating a comprehensive and flexible training programme for modern methods of timber construction.

With a micro-credentialing approach now in pilot delivery in England and Scotland, learners gain specialist timber construction knowledge and skills for 'better, faster and greener' delivery, addressing the climate emergency and affordable housing crisis.

Our ambition is to support every built environment professional – whatever their role – to identify and address timber skills and knowledge gaps to ensure the industry can make best use of timber in construction.

That's why we're publishing this industry-agreed Timber Technology Engineering Design (Timber TED) Competency Framework as an open access resource.

This is the industry-agreed definition of what a skilled construction practitioner should know and be able to do when building with timber.

What is needed now for the construction sector and government to hear this call to action: ensure access to everyone who needs this training and development in timber technical knowledge and core skills to help achieve net zero carbon.

02

KEY FACTS

'Develop policies... to drive more resource-efficient construction and use of existing low-carbon materials, including a substantial increase in the use of wood in construction.'

Progress Report to the UK Parliament, Climate Change Committee (2021)

'We have established a cross-government and cross-industry Timber in Construction Working Group to design a policy roadmap identifying key actions... including Competency & Skills'

Building to net zero: costing carbon in construction UK Government Response to the Environmental Audit Committee's First Report (2022)

39% Construction's contribution globally to total energy-related CO2 emissions

World Economic Forum, 2021

350,000 Number of additional UK construction workers needed to reach net zero by 2050

CITB Industry Insights, 2021

745 kgCO2/m2 Net benefit carbon capture of modern timber engineered products from sustainably managed forests, compared to other forms of construction

X-LAM Alliance, 2015

4% Recommended increase in UK forestry to boost supply of home-grown timber

UK Committee on Climate Change, 2020

81% Percentage of UK construction timber already recycled or re-used

WRAP, 2019

'Scotland's new housing sector is typically 75% timber based. Growing the provision and development of courses, funding support and training materials which can upskill and support new skills entry will support new housing development.'

New Housing & Future Construction Skills, Scottish Government Short Life Working Group (2019)

'Due to its potential to support the circular economy in Wales and its important role in contributing to decarbonisation, timber will become increasingly important to utilise.'

Re-imagining Social House Building in Wales, Llywodraeth Cymru (2020)

03

ACADEMIC FOUNDATION

Professor Robert Hairstans

Founding Director NMITE-CATT

Construction productivity has stagnated globally, and yet this sector continues to consume approximately half of all extracted materials and contributes 39% of all carbon emissions.

The construction sector is one of the UK's largest, employing 3.5 million people (CLC Skills Plan 2021). However, according to the latest CITB CSN industry outlook report, demographic issues and a continued skills crisis mean that we still need 224,900 extra workers (44,980 a year) to meet UK construction demand between now and 2027.

As the CITB explains: "From building the homes the country needs, to constructing energy and transport infrastructure and retrofitting the built environment to help drive down energy bills and meet net zero targets, the need to recruit and retain talent in the sector has arguably never been greater."

This skills gap is particularly acute in the private and public sector housing markets, undermining any chance of achieving the UK Government targets of 300,000 housing starts per year, or of making those new homes sufficiently low carbon to help meet the country's climate change targets.

However, there are building materials, products and systems that can help.

Modern engineered timber products, such as cross laminated timber (CLT) from sustainably managed forests, capture carbon and store it in the built environment (676kg of CO2 per m3, as measured by the X-LAM Alliance, 2015). This results in a net benefit of 754kgCO2/m2 relative to other forms of construction.

The embodied carbon of a house constructed using offsite panellised timber frame (with most of the carbon embodied in the concrete substructure) is approximately half of that using traditional masonry forms.

Timber buildings are capable of meeting operational performance targets, including Passivhaus standards of airtightness and thermal performance. As a lighter-weight material, timber can also be more easily used in modern methods of construction, minimising construction waste and improving productivity.

Given the vast array of products and timber systems now available and advanced treatments for durability and fire performance, advanced timber technologies can also respond to the varying needs of the sector, from restoration and retrofit to new build solutions and infrastructure.

But the skills necessary to meet stringent quality and environmental requirements and to achieve net zero targets, let alone achieve the collaborative, regenerative design, whole-life performance and digitised approaches we also need in construction, all demand new models of education.

There is a significant market and potential learner audience for this education, throughout the supply chain and across a myriad of roles, including, for example:

- Building performance technologist
- Cost consultant
- Structural engineer
- Architect
- Architectural technologist
- Architectural engineer
- Building information model and digital technologists
- Technical sales and specification
- Specialist timber contractors and erectors
- Construction project management
- Manufacturing and operational management

All these roles need a new approach to education in the future, and all their qualifications need to include an improved understanding of innovation in modern timber construction.

Current graduates are largely unaware of new technical knowledge such as manufacturing line approaches to building, or how modern products like CLT can replace carbon-intensive concrete and steel for the delivery of long-span structures and higher rise buildings.

The timber industry consistently calls for improved education. It wants to see a wider understanding of timber's attributes, potential uses and impacts on productivity, environmental improvements, whole life cost/benefits, building performance, and structural and material performance. Employers require more skilled personnel to ensure responsible timber design and delivery, building up timber engineering knowledge and skills, and meeting increasing demand for modern timber construction.

To achieve this, the education of future built environment professionals needs to instil collaborative practices, improved understanding of the net zero challenge, meaningful and valuable work experience with an emphasis on SME engagement for more rounded development (supply chain, business and entrepreneurship) according to The Institution of Engineering and Technology, 2021.

A skilled and collaborative approach to the design process is necessary, taking note of the interdependences of building, fire and structural performance, while remaining compatible with the supply chain and business architecture of the organisation and corresponding quality assurance frameworks.

In short, the skills needed for responsible design and construction provide the perfect platform for greater use of timber. This will bring us more environmentally and thermally efficient homes and buildings, and the corresponding comfort, health and wellbeing benefits to all building users.

04

TIMBER TED COALITION

DEVELOPERS OF THE TIMBER TECHNOLOGY, ENGINEERING AND DESIGN (TIMBER TED) COMPETENCY FRAMEWORK

TIMBER DEVELOPMENT UK

Edinburgh Napier UNIVERSITY

MITE

TRA

HARLOW CONSULTING

Built Environment – Smarter Transformation

STRUCTURAL TIMBER ASSOCIATION
Building solutions in timber

SWEDISH WOOD

funders

HCI Skills Gateway

ufi VocTech Trust

05

COMPETENCY FRAMEWORK

This is a framework for professionals which sets out:

- core technical competencies
- cross-disciplinary competencies
- core behaviours and meta skills

Job roles within scope include (but are not limited to):

- Building performance technologist
- Cost consultant
- Structural engineer
- Architect
- Architectural technologist
- Architectural engineer
- Building information model and digital technologists
- Technical sales and specification
- Specialist timber contractors and erectors
- Construction project management
- Manufacturing and operational management

Scope and prerequisites:

The competences are designed to be at English, Welsh & Northern Irish Levels 5-7 / Scottish Levels 8-11 (equivalent to HNC/D - degree level)

Individuals will have the required foundation knowledge in maths, English, physics and/or chemistry, according to job role

Depending on job role, individuals may also require additional training to gain a CSCS card

DEVELOPMENT PROCESS

The development of the framework began with desk research using a range of sources, including:

- Job descriptions
- Existing, relevant competency frameworks
- IStructE Initial Professional Development Chartered Member requirements
- Engineering Council Professional Engineering Competence (UK-SPEC)
- Structural Timber Association (STA) bulletins
- RICS Requirements and Competencies guide

The desk research and interviews with key sector stakeholders enabled us to draw together a first draft of the framework which has been presented to working group members for discussion and feedback. As a result, revisions have been made and, further content developed and refined. Feedback on the framework draft has also been obtained at two events:

- Timber Technology, Engineering and Design Steering group meeting
- Offsite/Mass Timber Construction Virtual Conference

Following a further review by the working group, we also sought wider views on the structure and content of the framework through an industry survey.


CORE TECHNICAL COMPETENCIES
Design and specification
Manufacture
Construction
Building science and materials
Health, safety, regulation and legislation
Sustainability and the circular economy
Core behaviours and meta skills

DESIGN AND SPECIFICATION

Knowledge

Structure

- The intended use of the structure
- Location of the intended structure and access to the site
- Factors affecting load transfer and stability
- Foundations and soil/structure interactions
- Functions of timber frame systems
- Progressive or disproportionate collapse
- The appropriate applications of different timber systems (e.g timber frame; CLT; post and beam; open and closed panel systems; SIPs)
- The interface between timber and other materials, e.g. concrete and steel
- Basic beam and frame interaction
- How the interaction between different materials influences tolerances
- Racking design
- Braced and unbraced frame analysis
- Connection detailing
- Integration with building services (e.g. MEP or drainage/rainwater pipes etc.)

Fire

- Fire safety design and specification
- Fire performance of different materials
- Compartmentation and spread of flame
- Principles of structural fire protection design
- Commissioning and interrogation of specialist analysis by others

Design and technical drawing

- How design information and data should be communicated
- The principles of, and methodologies involved in, Design for Manufacture and Assembly (DfMA)
- Codes of practice for the design of timber structures including Eurocodes and British Standards
- Appropriate design software systems and digital solutions (i.e. BIM /Rhino3d/AutoCAD/Revit/ Grasshopper/CSSuite/Consultec/MiTek/ SketchUp)
- The importance of designing for adaptation, and disassembly.

Sustainability

- Sustainability factors that impact on design include drainage, heating, lighting, materials, ventilation, water and sewerage

Skills

- Engage with and understand the requirements of:
  - the client and/or building users ✓
  - warranty providers and insurers ✓
- Contribute to the development and maintenance of design standards, templates and guides ✓
- Prepare schedules, drawing lists, drawing issue sets and specification documents ✓
- Produce technical drawings to illustrate concepts, feasibility and initial design ideas ✓
- Develop digital models using appropriate design tools:
  - 2d drawings for project stages ✓
  - 3d models of timber structures, connections and interface details ✓
- Contribute to project meetings. ✓

Knowledge

Process

- The process and requirements involved in setting up a factory or processing plant
- Manufacturing objectives and any associated KPIs
- Production management techniques and principles including lean manufacturing (e.g. lean collaborative planning; visual management; 5S workplace organisation; data collection, analysis and root cause problem solving; work observation and productivity improvement)
- Wood product and processing processes including:
  - Sorting (e.g. by species, use, diameter, length)
  - Grading (e.g. quality, grain, knots and defects)
  - Drying (e.g. kiln, air)
  - Surfacing (e.g. removing split ends, knots)
- Manufacturing techniques for a range of timber products e.g. veneers, plywood, particle board
- Applications and benefits of different types of machinery
- Typical faults or issues that could arise during the manufacturing process
- Components and finishing
- Required components and finishing methods, including:
  - Steel fixings
  - Internal and external finishing of buildings
  - Milling off
  - Connections

Skills

- Organise and cut timber efficiently to maintain production needs ✓
- Use company documentation and systems to produce required timber engineered components ✓
- Ensure all mandatory inspections are completed and any non-compliance is recorded and corrective actions put in place ✓
- Oversee management of maintenance function including PPM schedules and reactive maintenance ✓
- Maintain all relevant documentation including daily planning, dashboards, quality control etc. ✓
- Monitor production quality and delivery performance ✓

Knowledge

Structure

- Site substrate and foundation design
- Basic beam and frame interaction
- Braced and unbraced frame analysis
- Differential movement and where this typically occurs
- Buildability and construction techniques, such as basic detailing
- Methods of connecting structural elements
- Factors affecting overall structural stability, including racking stability and sliding resistance
- Interaction between superstructure and substructure

Process

- Demolition
- Setting out
- Defects and investigation
- Temporary works
- Substructure construction
- Superstructure construction
  - Construction programming and sequencing
  - Lifting and logistics
  - Site construction plant
  - Health and safety
- Impact of environmental factors on construction (e.g. wind, rain, snow) and means of minimising the effect, e.g., facilitating water run off, temporary storage.

Fire

- Methods and requirements for fire prevention in timber structures
- The importance of ensuring fire-proofing during the construction process
- Access requirements and facilities needed for fire and emergency services

Management and administration

- Change management
- Legal implications in case of issues/errors

Skills

Installation

- Ensure working methods and appropriate regulations are adhered to during construction ✓
- Using contract information provided, follow design and specification information as relevant ✓
- Install in full compliance of manufacturers details and recognised standards of good practice ✓
- Inspect the site thoroughly during and following completion of works to ensure compliance with specification, regulations and any applicable standards or codes or practice ✓

Administration

- Prepare Risk Assessments ✓
- Write method statements ✓
- Secure relevant permits and licences where required ✓
- Deal with material suppliers to ensure availability of materials ✓
- Maintain the construction programme and schedule work as required ✓
- Keep records of work completed ✓

Knowledge

Products and materials

- Availability, behaviour, grading, compliance, declarational performance, costs and manufacture of:
  - Timber and wood-based products
  - Timber species: Hardwoods; Softwoods; commercial groupings
  - Sawn timber and roundwood
  - Engineered timber products: Glulam, CLT, I-joists; particleboard; fibreboard; OSB; I-beams; veneer, plywood, Laminated Veneer Lumber
  - Treated and modified wood
  - Manufactured/reconstituted timber products: fibreboard, OST
  - Insulation materials
  - Other materials: concrete, steel, glass, plastics; glues, resins, fixings etc,
  - Alternative products
- Appropriate uses and applications of timber and timber products
- How timber species are affected by climate and other environmental factors and the impact on availability

Engineering

- Core principles of structural timber engineering and structural mechanics
- Principles of building performance:
  - building acoustics and sound insulation
  - thermal performance of timber structures (e.g. typical u-values achievable by different timber systems; thermal bridging and air leakage)
  - fire properties
- Factors effecting the energy performance of timber buildings
- Different characteristics of different build structures (i.e. 6 panel)

Wood Science

- Wood material properties (fibres, cell structure, durability)
- Growth characteristics
- Expansion/contraction
- Decay mechanisms
- Heat treatments/acetalisation and preservatives
- Bi metallic corrosions/ acidity properties
- Anti-corrosion treatments
- Material testing procedures
- Feasibility regarding timber testing and expectations of industry

Moisture and breathability

- The difference between green timber and seasoned timber
- The amount of water in timber
- The meaning of Equilibrium Moisture Content (EMC) and Fibre Saturation Point (FSP)
- Why and how the moisture content of timber changes
- Methods of drying and storing timber
- Shrinkage and movement
- How insulation can impact moisture within a building

Skills

- Research and locate current manufacturer information ✓
- Compare and contrast products and materials ✓
- Identify and investigate material defects ✓

HEALTH, SAFETY, REGULATION AND LEGISLATION

Knowledge

Legislation and regulation

- Relevant legislation, regulations, statutory guidance and standards of performance relevant to the construction industry in the UK/four nations – as appropriate – specifically with regard to:
  - Health and safety
  - Insurance
  - Contract law
  - Contractual obligations
  - The differing requirements for different types of buildings and their use
- The impact of health and safety requirements on design, construction process and building maintenance
- The requirements of other relevant legislation and regulations, including the Equalities Act, Intellectual Property (IP)
- The roles and responsibilities under the respective legislation
- The expectations of Building Control
- The role of expert witnesses
- The requirements for fire safety reporting

Standards and warranties

- Relevant principles and technical standards for building safety
- The requirements of warranty providers

Risk

- Different types of risk e.g. design; financial/commercial; environmental; fire; governance; operational; technology
- The role of hazard and risk assessments in avoiding or mitigating the potential risks posed by both construction materials and construction activities to:
  - site personnel
  - building users
  - the general public
- The requirements of the Construction Design and Management (CDM) regulations and the importance of designing out risks

Skills

- Use the appropriate standards/Codes of Practice and specifications within specification or design criteria ✓
- Develop hazard and risk assessments ✓
- Develop, manage, distribute and maintain information about the design which is critical to ensuring that structures are designed to be safe, built to be safe, operated safely and maintained to be safe throughout the project lifecycle ✓

Knowledge

Design and construction

- How design, technology and construction processes can contribute to sustainable building
- The drivers for achieving sustainability, including the client's motivations and expectations
- The importance of designing for deconstruction
- Potential sources of contamination (solid, liquid or gas), investigation measures required, and design solutions adopted to mitigate risk
- The importance of protecting vegetation and wildlife at the planning, design and construction stages

Carbon

- The meaning of 'embodied carbon', how it is calculated and means by which it can be reduced
- What is carbon sequestration and how it is calculated

Products and certification

- The purpose and uses of Environmental Product Declarations (EPDs) and where they are published
- The role and functions of the Forest Stewardship Council (FSC) and Programme for the Endorsement of Forest Certification (PEFC) in terms of certification and chain of custody
- Relevant environmental and sustainability objectives, issues and legislation, and their influence on timber engineering and design
- The environmental benefits of building with timber in comparison to other materials such as steel or concrete
- The importance and benefits of material and resource efficiency
- The importance of preserving the value of materials beyond their initial use
- The criteria by which sustainability of finished buildings is measured

Skills

- Adopt sustainable practices ✓
- Carry out/contribute to environmental impact assessments ✓
- Manage best practice environmental management systems, e.g. ISO 14000 ✓
- Manage risks to minimise adverse impacts to people or the environment ✓
- Use resources efficiently and effectively with consideration for environmental impact ✓
- Advise clients on the feasibility of, and factors (e.g. financial) involved in, achieving their sustainability objectives ✓

CORE BEHAVIOURS AND META SKILLS

Critical thinking and problem solving

- Identify and apply appropriate solutions to problems
- Exercise independent, professional judgement
- Evaluate and draw conclusions from information

Innovation

- Recognise when to innovate and when to use an existing solution
- Apply curiosity and creativity to solving problems
- Use initiative to apply solutions and implement change

Collaboration and team work

- Exhibit strong interpersonal skills
- Build, maintain and manage key relationships
- Co-operate and work flexibility as part of an effective team
- Interact professionally to build collaboration between different disciplines
- Appreciate the skills of other professionals in the engineering and design process
- Promote equality and diversity in the workplace
- Build relationships with key stakeholders

Organisation

- Time management with good organisational skills
- Good attention to detail and accuracy in preparation of information

Professionalism and career development

- Reflect on own performance to identify areas for improvement
- Understand the limits of your responsibilities, knowledge and competence
- Plan and carry out CPD activities and record evidence
- Maintain and broaden competence
- Where appropriate, comply with the requirements of any professional institute – upholding and supporting its values
- Comply with any relevant codes of conduct governing the profession
- Work independently without close supervision

Ethics

- Commit to working in an ethical and socially responsible manner
- Avoid conflicts of interest

COMMUNICATION

Knowledge

- Different communication styles and how they can affect the transmission and receipt of information
- The audience for communication and how to adapt your communication style accordingly
- The importance of listening as a key component of communication
- How to adapt your communication style to different audiences and social and cultural norms
- The implications of decisions and why they may need justification
- How to prepare for and follow up following key communications such as formal meetings
- Different types of collaboration and tools for doing so, including online methods
- 3D images, how to communicate and draw out necessary information
- Methods of presenting information and the hierarchy of information

Skills

- Communicate effectively with colleagues and clients using oral and written communication techniques, including: reports, letters, emails, calculations, specifications, presentations, meetings, group discussions, informal conversations, proposals and working papers (e.g. meeting minutes, planning documents, correspondence) in a variety of formats ✓
- Communicate visual through drawings, specifically sketching by hand ✓
- Use a varied vocabulary, adapting your language, tone and communication style to suit your audience ✓
- Present ideas, opinions and solutions confidently within the workplace ✓
- Justify decisions made if challenged ✓
- Use tact and discretion to persuade others effectively and with confidence ✓
- Ask relevant questions to check the listener's understanding ✓
- Manage the expectations of others (internal and client) ✓
- Prepare adequately for meetings and formal communications, by engaging with relevant literature such as reports and minutes ✓

CROSS-DISCIPLINARY COMPETENCIES

Knowledge

Design and construction

- Methods of calculating construction costs
- Procurement models and techniques
- Financial consequences of decisions at each stage, e.g. design, manufacture, construction etc.
- Impacts of international affairs on the cost and availability of raw materials, labour and manufacturing processes
- Whole life cycle analysis and whole life costs

Contracts and insurance

- What is a contract and their purpose
- The different forms of contract, including standard forms of contract such as the difference between a design and build contract
- The financial impacts of a contract being in place or not being in place
- Who your contract is with and where liabilities lie
- Contracts and the application of contracts, including standard forms.
- The common causes of disputes in construction contracts and how these can be mitigated
- Planning and programme timings for specific contracts
- The need for different types of insurance: e.g. product liability, professional indemnity, integrated project insurance, building insurance

Competitive Tendering

- The USP of the product or service being offered
- How to assess a brief, compare and contrast
- How and circumstances when to present alternatives to the brief
- Fee assessment and quotations – preparing and analysing project costs for tenders (incl. materials, quantities, labour and time)
- How to set a brief – the key pieces of information to include and how it should be drafted
- Methods of assessing competitive tenders

Cilent care

- Systems for managing client care and communications including complaints
- KPIs – how to set and measure
- Methods for monitoring compliance
- Use of pre-contract design appointments as a collaborative way of working

Skills

- Negotiate contracts and work schedules ✓
- Monitor and control project costs – including cost analysis for repair and maintenance ✓
- Set insurance levels/ensure they are in place ✓
- Maintain regular and ad hoc reporting to clients and stakeholders ✓
- Collaborate with the marketing team ✓

Knowledge

Systems and procedures

- Quality systems and procedures to achieve quality in design and construction, such as:
  - Total Quality Management (TQM)
  - Quality Management systems (e.g. ISO)
  - Project Quality Plans
  - Environmental Management Systems (EMS)
  - European Technical Approval / CE marking / UKCA marking
  - Eurocodes
- Which standards are appropriate for different types of projects, and the associated performance criteria

Process

- Quality roles and definitions
- The consequences of poor quality to the organisation and industry
- Typical quality issues and challenges and methods for preventing their occurrence
- The importance of embedding a quality culture and how to make change 'stick'
- Evaluation of building performance post-occupancy

Skills

- Manage continuous quality improvement and promote quality in the organisation ✓
- Manage/contribute to best practice methods of continuous improvement, e.g. ISO 9000, EFQM, balanced scorecard ✓
- Carry out/contribute to quality audits ✓

Knowledge

- Your role and responsibilities
- Organisational structure, reporting and communication lines
- The responsibilities of different disciplines at each stage of design, manufacturing and construction and the importance of interaction/collaboration
- The benefits of developing diverse and inclusive teams

Skills

Projects

- Produce and implement procurement plans ✓
- Estimate likely costs and budgets ✓
- Contribute to project risk assessments ✓
- Collaborate with key stakeholders ✓
- Plan programmes and delivery of tasks ✓
- Identify and monitor resources and costs ✓
- Prepare and agree contracts/work orders ✓

Tasks and resources

- Manage the balance between quality, cost and time ✓
- Manage contingency processes ✓
- Contribute to the management of project funding, payments and recovery ✓
- Satisfy legal and statutory obligations ✓
- Manage tasks within identified financial, commercial and regulatory constraints ✓

Teams and Resources

- Motivate others to make a valuable contribution ✓
- Carry out/contribute to staff appraisals ✓
- Plan/contribute to the training and development of staff ✓
- Gather evidence from colleagues of the management, assessment and feedback that you have provided ✓

Knowledge

Digitisation

- Appropriate digital systems and processes used in the built environment (i.e. BIM)
- Relevant standards for digitisation

Software

- Software used for timber design (e.g Rhino3d /AutoCAD /Revit /Grasshopper /CS Suite/ Consultec/ Mitek/ SketchUp)
- Other relevant computing packages in day to day use including MS Word, Excel and Powerpoint and how to operate them
- How to use cloud-based software, its advantages and limitations

Social media

- The relevant applications for digital marketing and their potential benefits

Data

- Legislation on data management and including GDPR and the Data Protection Act (DPA)

Skills

- Use appropriate digital communication methods, e.g. email, online collaboration tools ✓
- Collate, analyse and evaluate data ✓
- Produce spreadsheets and database documents ✓
- Use electronic project databases or BIM ✓
- Retrieve and store information in line with organisational protocols, relevant regulations and legislation ✓
- Observe document management ✓
- Ensure data security ✓

06

NEXT STEPS

A competency framework is meaningless without the will, drive, and backing to engage and support learners through its journey.

If we are serious about increasing the use of timber in construction to achieve net zero, a cross-cutting education funding approach is needed to ensure we have the skilled personnel ready to take on the timber construction challenge across the UK. This means:

- Establishing a multi-stakeholder leadership group for timber industry skills
- Accelerating accreditation and achieving the enthusiastic endorsement of industry bodies
- Progressing a trailblazer group of industry to support a degree apprenticeship standard for the timber construction sector
- Creating incentivised opportunities for lifelong learning with existing construction workforce through new and flexible CPD offers
- Identifying existing courses and learners which can be enhanced by adopting education content formed in response to the Timber Technology Engineering and Design framework
- Establishing an open access knowledge library of timber information

Project Delivery Partners:	Edinburgh Napier University, New Model Institute for Technology and Engineering, Harlow Consulting, NMITE, Harlow
Steering Committee:	TDUK, TRA, STA, Swedish Wood, BE-ST
Industry Working Group:	Build Collective, Oakwrights, Binderholz, Change Building, Milner Assoc, Speller Metcalfe, Donaldson Timber Systems, Silvatec, Saint Gobain, ASBP, Glulam Solutions, PYC, Xylotek, Waugh Thistleton Architects, Hundegger, Taylor Lane, MiTek, MAKAR
Pioneer Cohort on Timber TED short courses	Ollie Dewar (Taylor Lane), Gerard Clarke (Fast House), Sam Phillips (Stage One, Creative Services), Yacine Bouzida (Passage Projects), Jack Stone (Oakwrights), Daniel Guy (Border Oak Design and Construction), Kieran Thompson (IBI GROUP), Olivia Chan (dRMM)
Professional Body Recognition	Chartered Institute of Building (CIOB)

Courses designed to upskill and reskill the built environment professionals of the future and meet the engineering demands of the 21st century.

Find out more:
www.nmite.ac.uk/TimberTED

or get in touch at:
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