Jerry Tate Founder + Director Tate+Co Architects



Navigating Structural Timber Construction to Address Net Zero

# TATE + CO

# **A Journey in Timber**

Presented by Jerry Tate Founder + Director Tate+Co Architects 2 July 2024 



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# **Practice Approach**

TA

We are UK leaders in Regenerative Design



# "

We are architects, masterplanners and interior designers.

Passionate about regenerative design, we create environments that are sustainable, healthy and always connected to nature.

#### What we do



#### Architecture

#### Including

Concept Design | Detailed Design and Tender Packages | Passivhaus Design | Preapplication Enquiries | Planning Applications | Planning Agent Role | Building Information Modelling (BIM) | Lead Consultant and Design Team Coordination | Contract Administration | Principal Designer (CDM and BSA) | Post Occupancy Evaluation



#### Masterplanning

#### Including

Urban Design | Feasibility Studies | Vision Documents | Development Framework Documents | Outline Planning Applications | Lead Consultant and Design Team Coordination

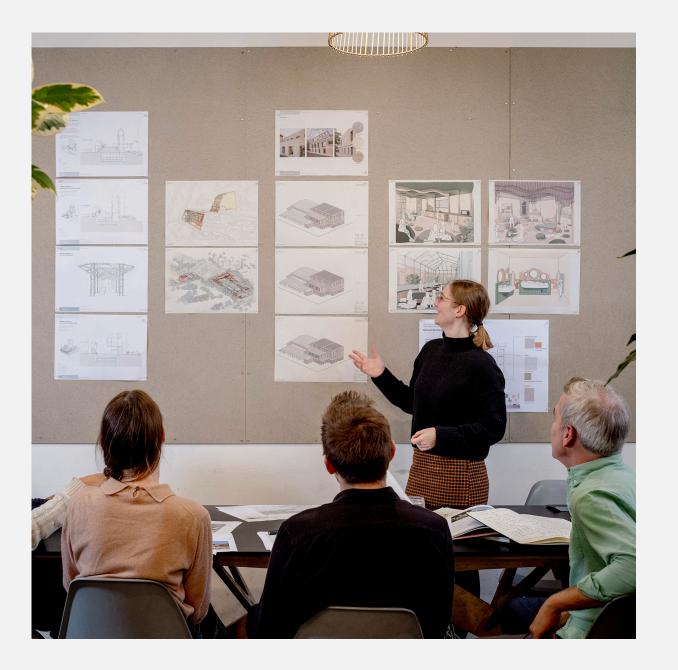


#### **Interior Design**

#### Including

Concept Interior Design | Detailed Interior Design for construction | Interior Design Coordination | Furniture, Fixtures and Equipment Specification | Site Supervision

#### How we do it



Understand what is already there

Develop a holistic strategy

Integrate nature

Make spaced for communities

Stakeholder engagement

Whole life carbon

Get the best team together

Really listen



### Why do we do it

# "

**98%** of our clients would work with us again. What they most enjoyed about the experience was our *collaborative nature and enthusiasm*.

**98%** of our clients *would recommend us* to a potential new client.

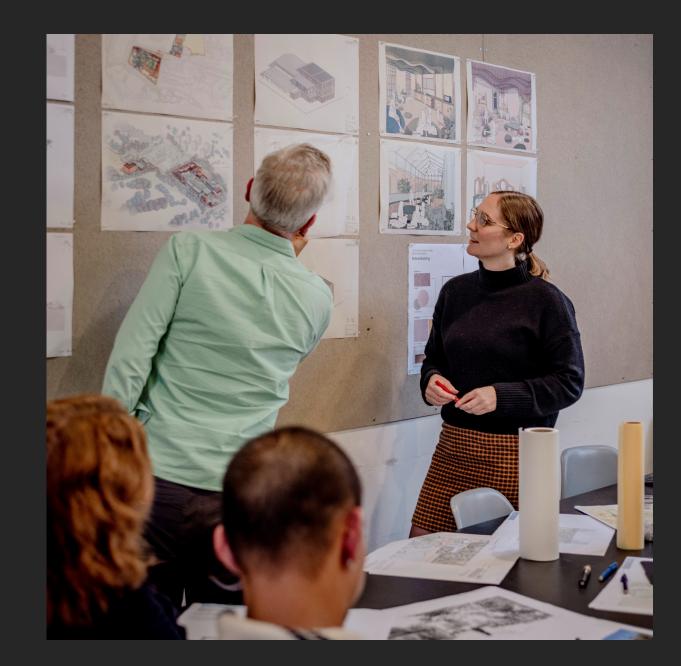
91% of our clients said the completed project *met the brief well* or *very well*.

I really trust them. Nothing would stop me from working with Tate+Co again.

# "

Clients describe us as strategic thinkers. They enjoy that we are able to unearth the true potential of their projects.

We get to the heart of what matters to define exactly what is needed, building friendly and trusted relationships along the way.



## Education Design













## **Residential Design**













## Hotel and Leisure Design













## Design for Culture











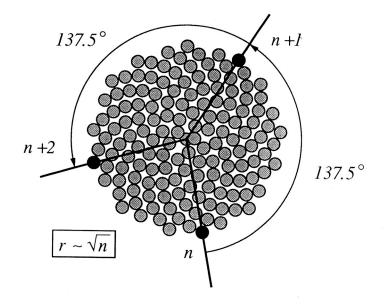


# 2.

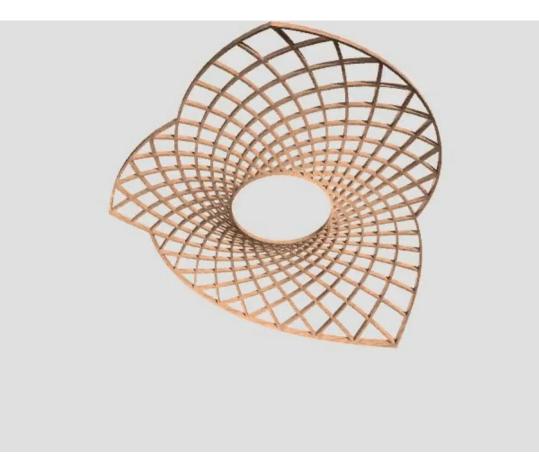
## A Journey in Timber

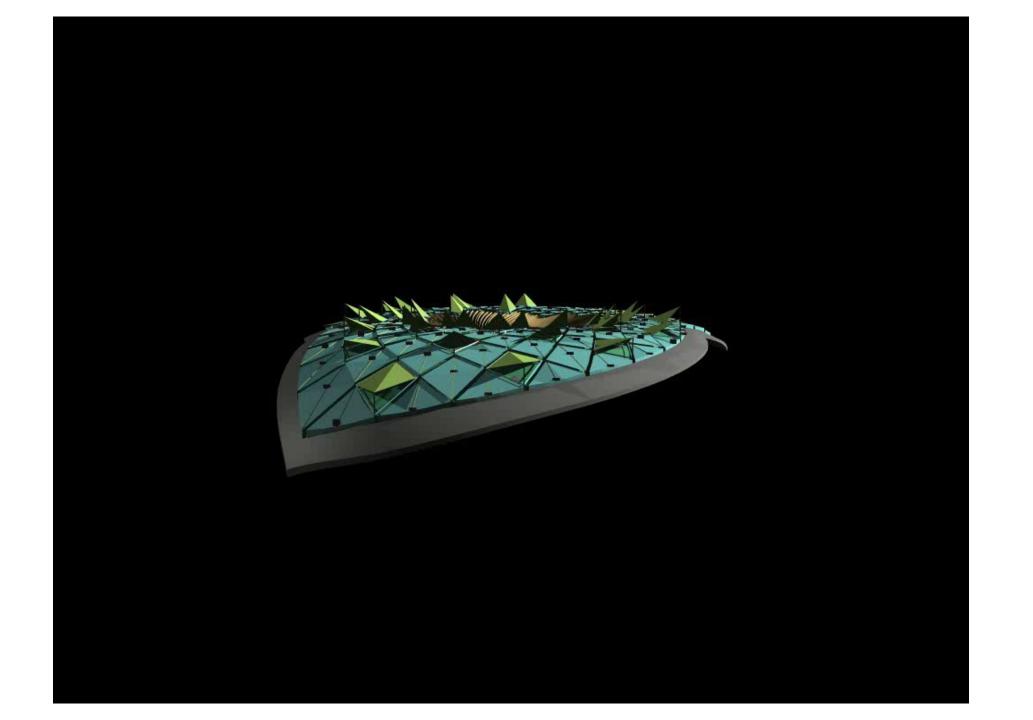






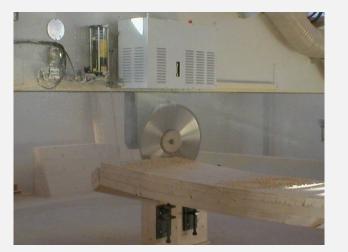
#define a 137.5 , /\* divergence angle \*/
#include D /\* disk shape specification \*/  $\omega$  : A(0)  $p_1$  : A(n) : \*  $\rightarrow$  +(a) [f(n \land 0.5) \sim D]A(n+1)



























# "

This house is a template for the ideal, modern family home.

Kevin McCloud, Grand Designs

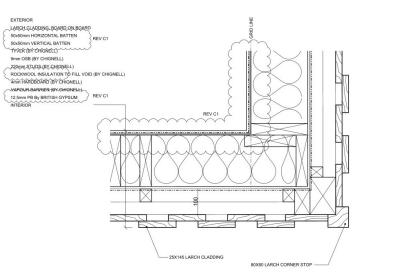


#### Masonry

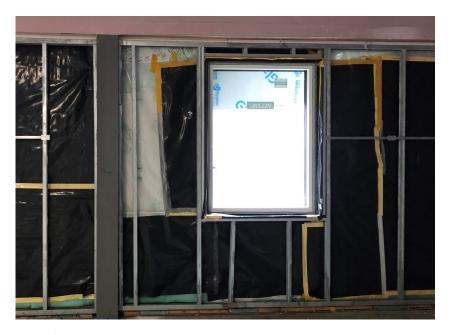


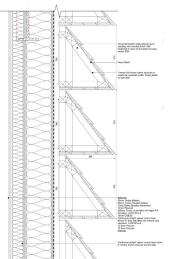
#### Timber frame

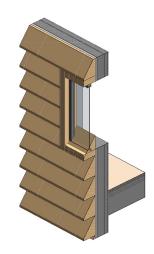


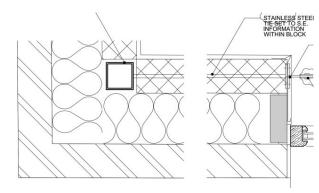


#### 'Met-sec'









#### Wood-Fibre



Warmcel



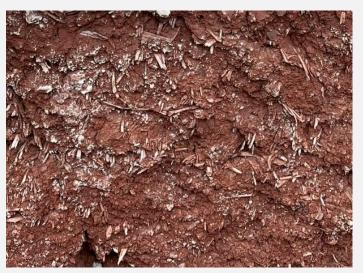
#### Rammed Earth



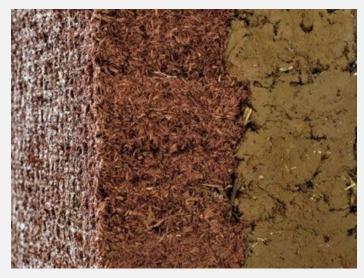
#### Hempcrete



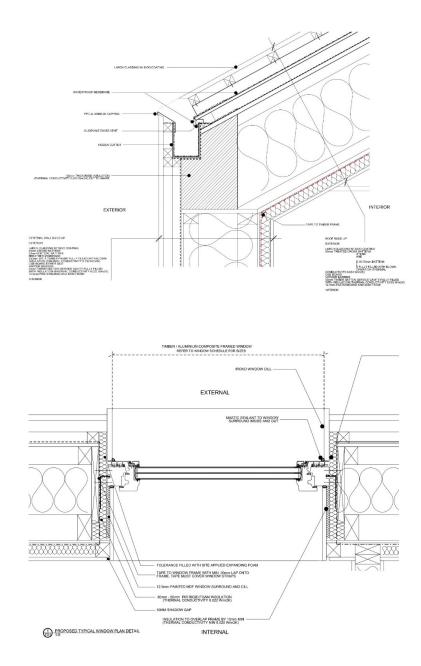
#### Cob

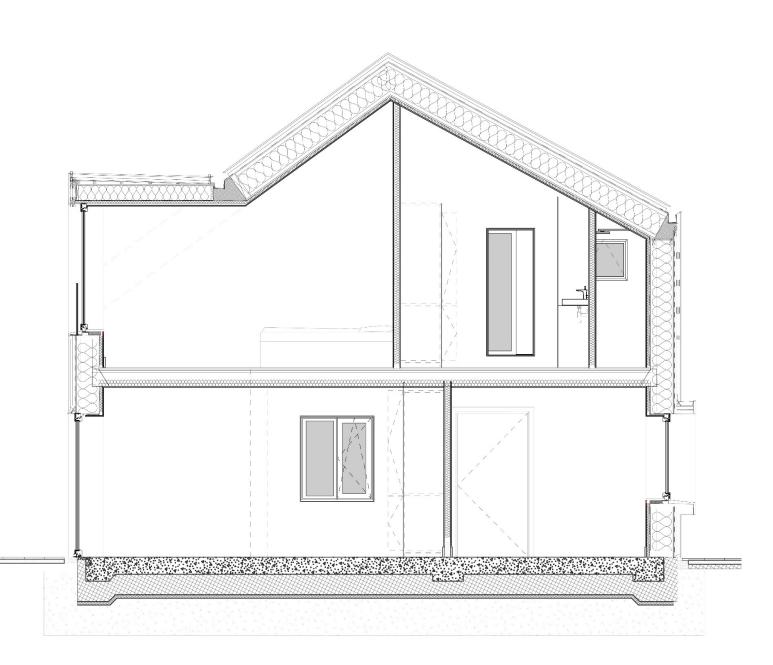


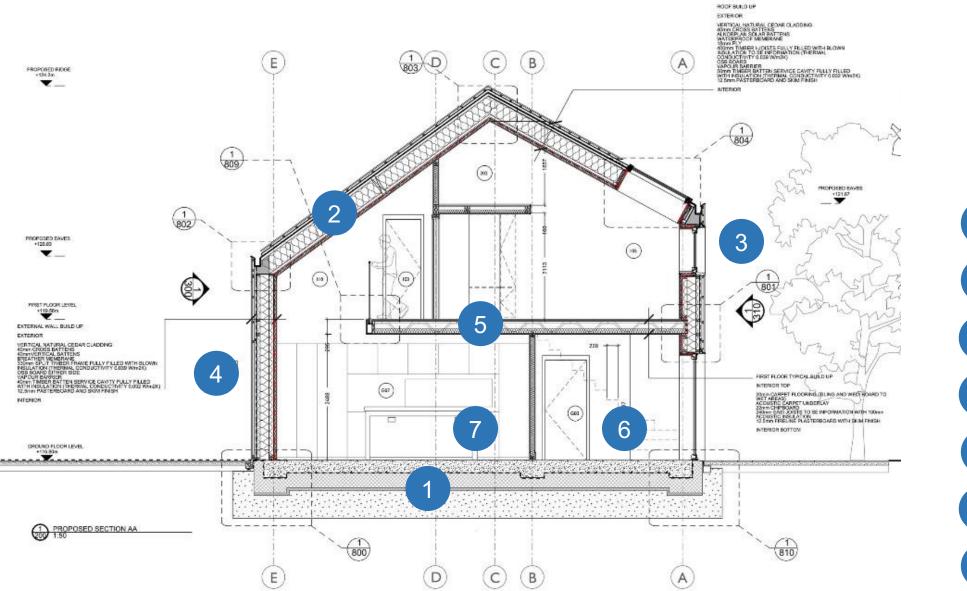
### 'Cobbauge'



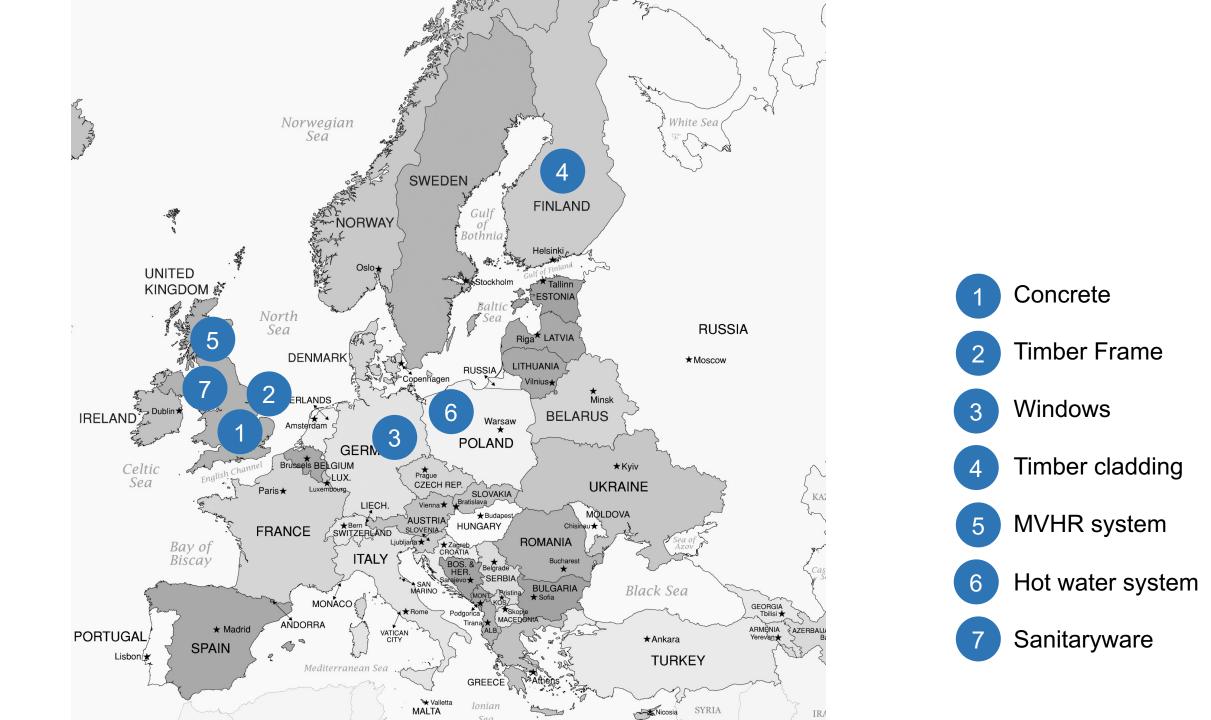




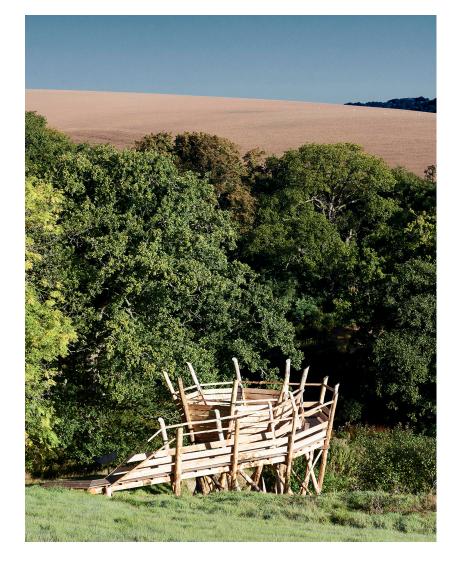




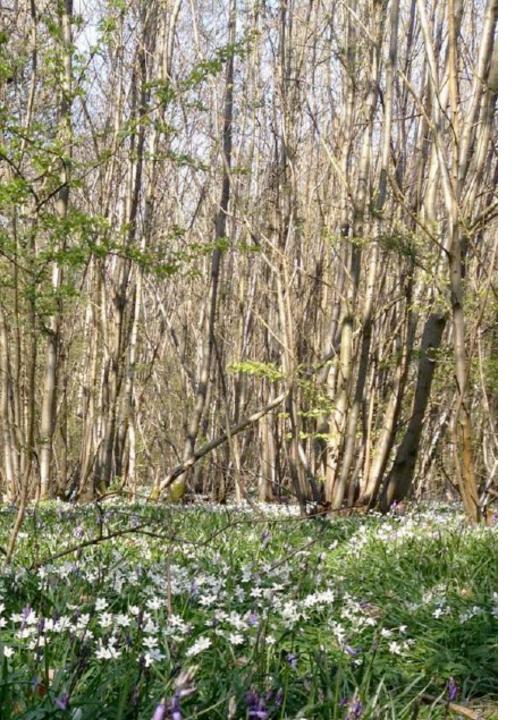






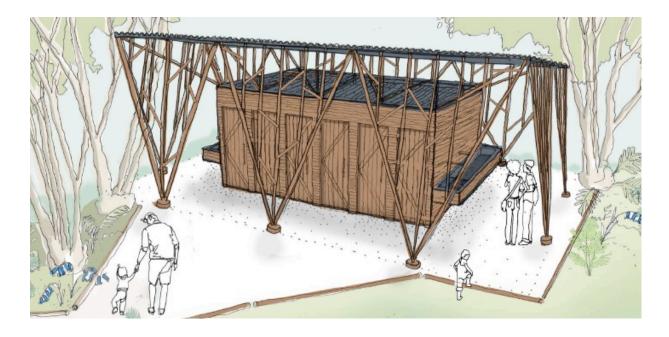






## Badgells Wood







# "

Tate+Co has suggested, innovative solutions for the heart of our campus and designed a building that is architecturally interesting functional, flexible and sustainable. It has been fulfilling and fun working with their team.

Michael Wilson, Headmaster Cranleigh Preparatory School



## "

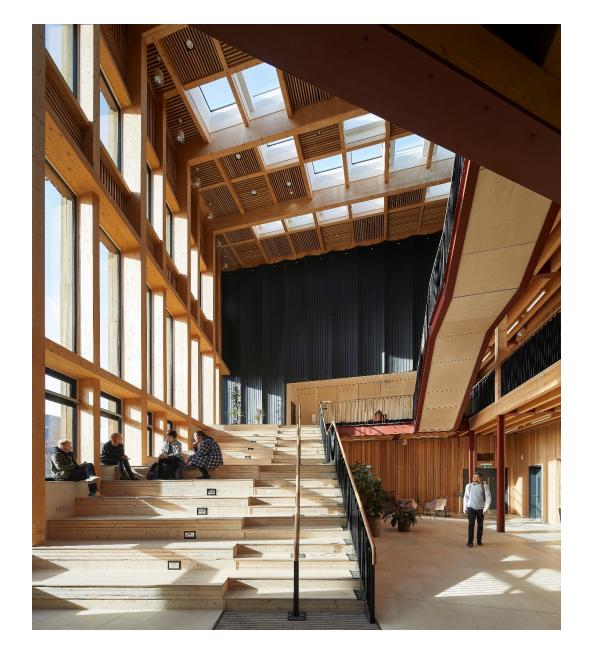
Tate+Co's design reflects the ambition and optimism of York St John University, making the most of the building's position in the centre of campus and showcasing our location in the heart of the city.

Rob Hickey, Executive Director of Innovation and Growth York St John University

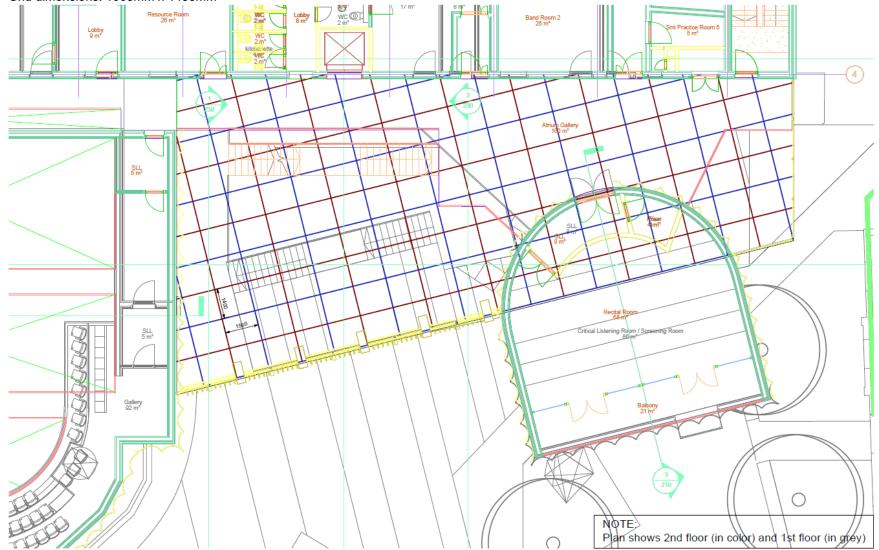




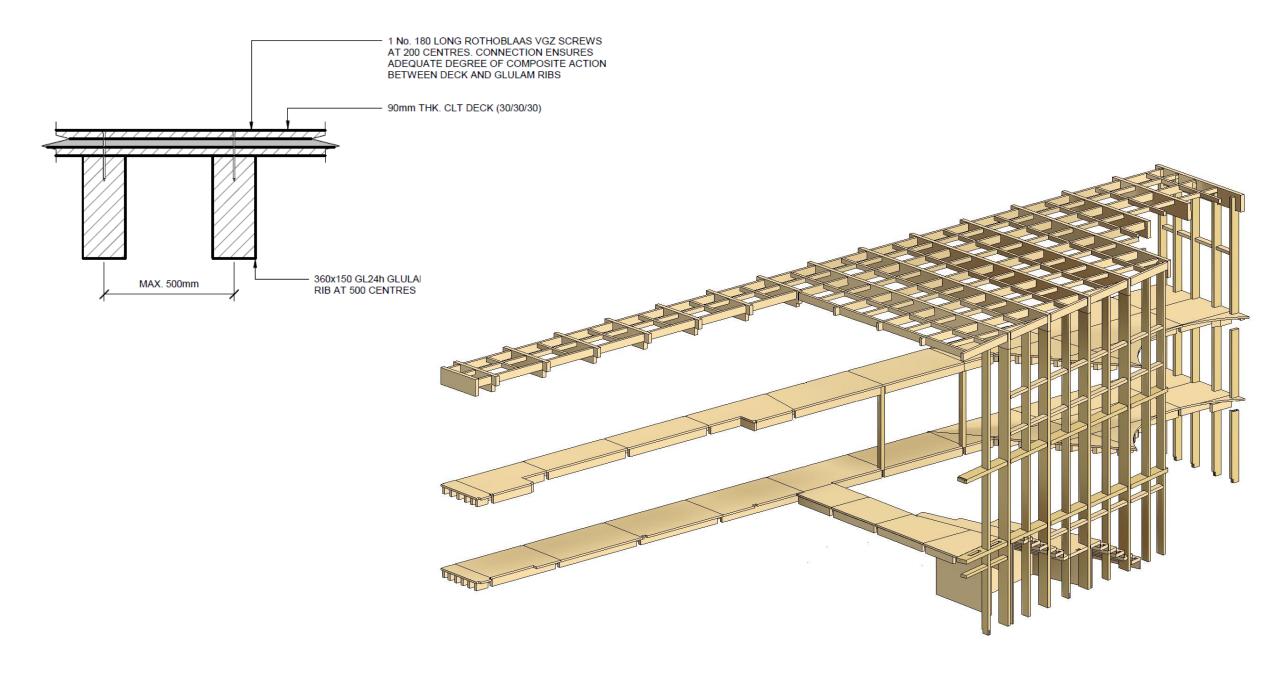


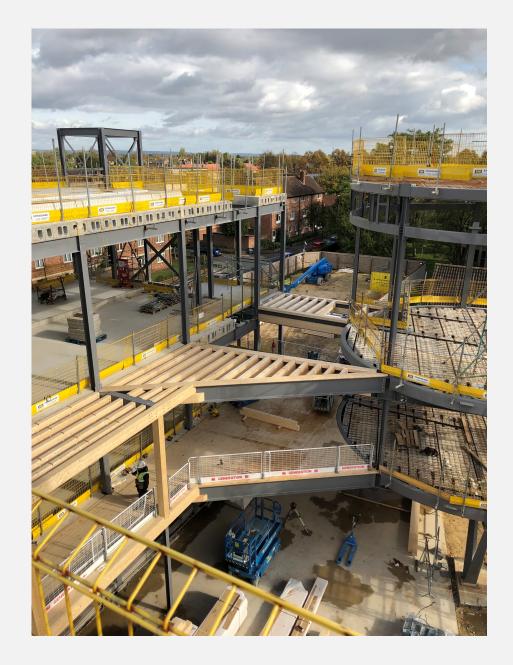


York St John - Grid - Option 2 Scale 1 in 100 @ A3 Grid dimensions: 1560mm x 1400mm



181109



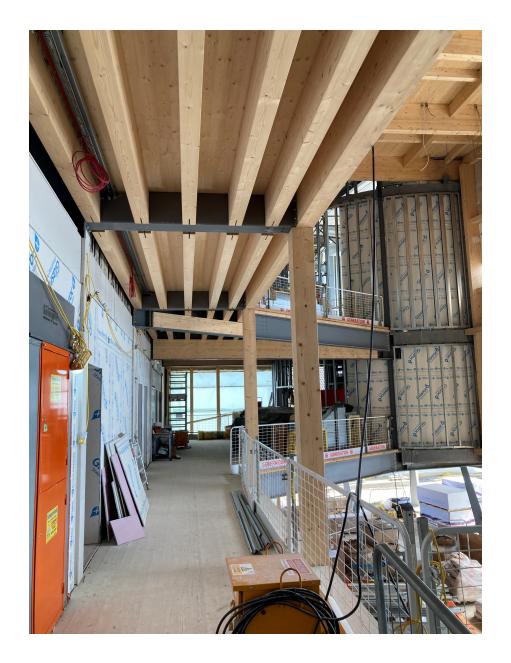


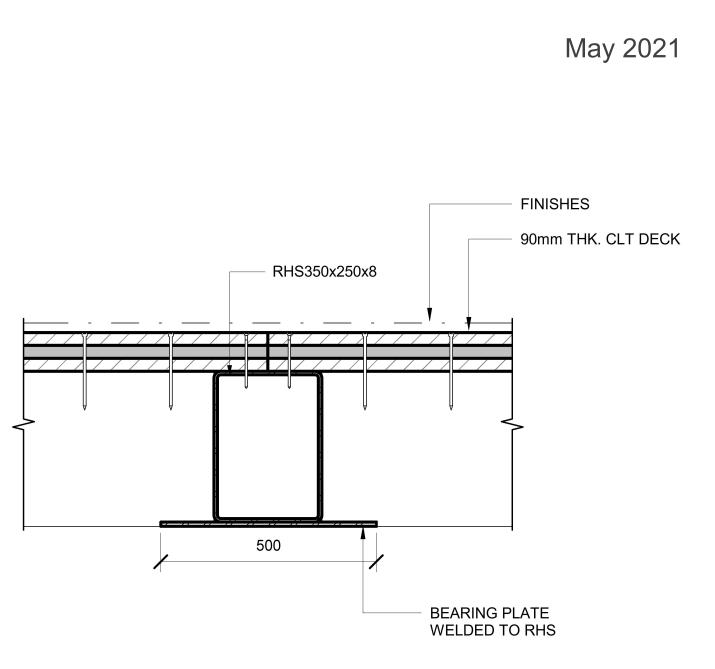


### October 2020



### December 2021







## September 2021



#### York St John University Creative Centre - Key Metrics

Passivhaus standard building fabric

- Roof 0.13 W/m<sup>2</sup>k
- Walls 0.11 W/m<sup>2</sup>k
- Ground Floor 0.13 W/m<sup>2</sup>k
- Windows 0.86 W/m<sup>2</sup>k
- Airtightness 2.61 m<sup>3</sup>/hr m<sup>2</sup> at 50 Pa

73 kwh/m²/year regulated energy use

900 kgCO<sup>2</sup>eq/m<sup>2</sup> upfront embodied carbon

1,100 kgCO<sup>2</sup>e/m<sup>2</sup> embodied carbon (A-C)

2,500 kgCO<sup>2</sup>e/m<sup>2</sup> whole life carbon (A-C)

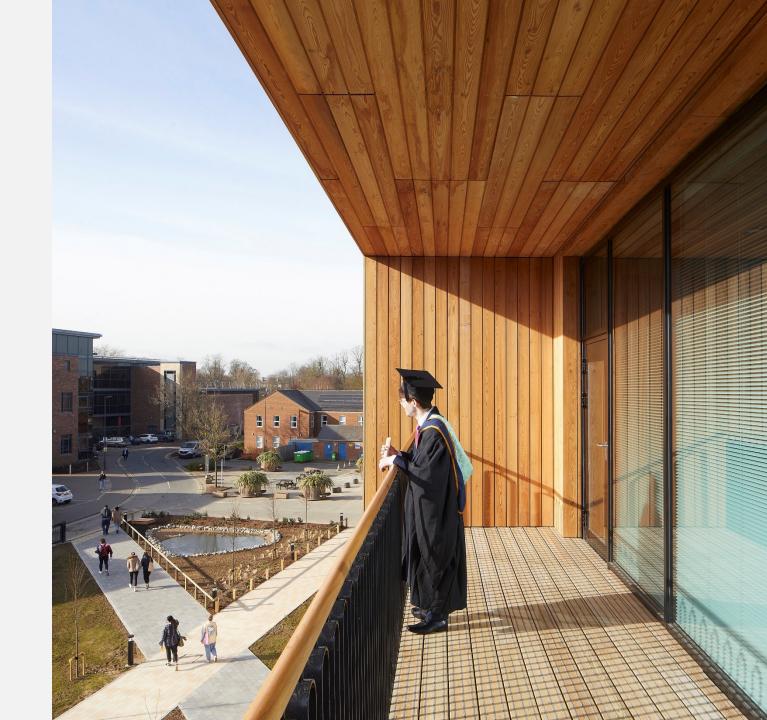
400,000 kgCO<sup>2</sup>eq sequestered carbon in timber

6.8 kWh/m<sup>2</sup>/yr on site renewable generation

54% Biodiversity Net Gain

**BREEAM Excellent** 







# TRURO SCHOOL

In collaboration with





## TATE + CO

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