

## HARRIS ACADEMY SUTTON

LOCATION

London,  
UK

## LARGEST PASSIVE HOUSE SCHOOL IN UK

The four-storey, six-form entry school accommodates 1,275 pupils and 95 staff within the impressive 10,625 m<sup>2</sup> space. The superstructure consists predominantly of offsite manufactured glulam beams and columns and cross-laminated timber (CLT) wall and slab elements.

The floor slabs were designed to bear only on external walls glulam structure and central spine KLH® – CLT walls, made possible by large continuous KLH® – CLT panels. As a consequence, internal walls can be added or taken away to reflect changes to teaching methods or uses that change over time.

Exposed soffits show the timber, helping the design language to be easily understood.

Architype's designs incorporate the circular economy of the structure; the bolted connections to the glulam frame can be dismantled and reused at the end of its life. Additionally, the exposed timber structure makes the building more lightweight, assisting in reducing the need for piled foundations which significantly reduced the Embodied Carbon of the building. Total sequestered carbon in the KLH panels for the Harris Academy project is 660 tonnes.

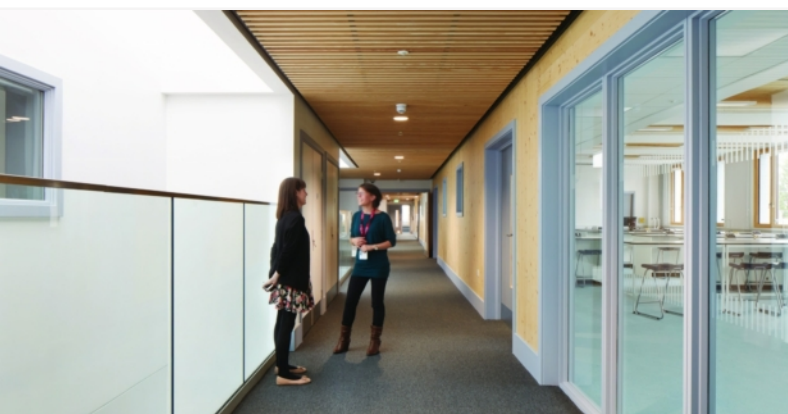
Classrooms are light and inspiring with optimised spatial orientation. The timber roof panels reflect the natural harmony of the building, with non-toxic materials providing exemplary air quality and environmental credentials.











#### ARCHITECT

Architype  
[www.architype.co.uk](http://www.architype.co.uk)

#### TIMBER ENGINEER

Ramboll UK  
[www.uk.ramboll.com](http://www.uk.ramboll.com)

#### KLH PROJECT SUPPORT

KLH UK Ltd.  
[www.klhuk.com](http://www.klhuk.com)

#### CLT SUPPLIER

KLH Massivholz GmbH  
[www.klh.at](http://www.klh.at)

#### AWARD

Building Awards 2020:  
 Building Performance Award

#### PHOTOGRAPHY

Jack Hobhouse (completed project)  
 KLH UK (construction images)