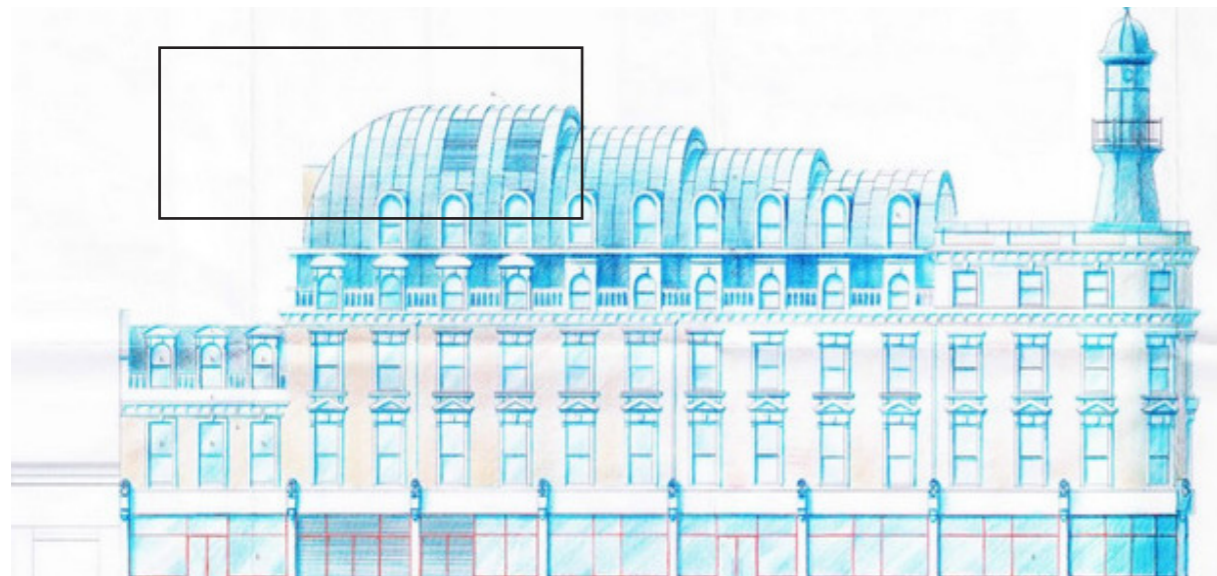


Site: The Lighthouse Building
Location: Pentonville Road
Architects: Latitude Architects



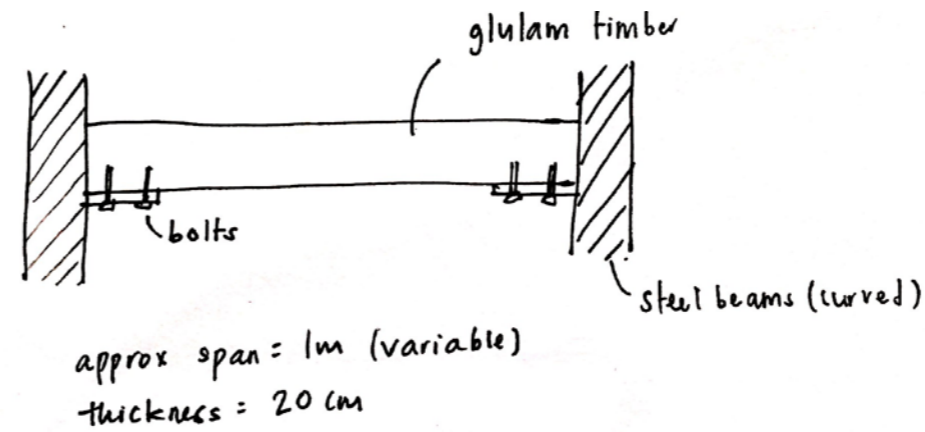
Site Photos



Side Elevation

Glulam Timber Roof Supports

Fang Lee
TS Materials



Glulam refers to glued laminated timber, an engineered wooden product that is used as a structural and decorative material in many construction projects. Glulam is made by laminating finger-jointed timber pieces using glue. The pieces are then clamped together under constant pressure till the glue dries. The lamination process results in a timber piece that is stronger than a traditional sawn timber piece.

There are various benefits to using glulam: firstly, it is a sustainable material that can be locally sourced and is renewable. Secondly, glulam can be easily prefabricated to meet the construction needs of the project in terms of dimension, quality and curvature. Thirdly, Glulam has an excellent strength to weight ratio as compared to steel, thereby providing certain benefits such as higher buildability and a smaller foundation. Lastly, glulam as a structural material performs well in the case of fire as it chars at a fixed rate and will not deform like steel. Despite that, glulam is not used in high quantities as it is expensive in price, likely due to its specialized manufacturing process.



Other Famous Projects that uses Glulam
Pompidou Metz by Shigeru Ban (left), Foundation Louis Vuitton by Frank Gehry (right)

References:
<http://www.woodsolutions.com.au/Wood-Product-Categories/Glulam>
<http://www.bucklandtimber.co.uk/about-our-glulam/benefits-of-glulam/>
<http://uk.phaidon.com/agenda/architecture/articles/2013/december/17/gehrys-fondation-louis-vuitton-to-open-next-year/>
<http://www.jamesewingphotography.com/index.php?pt=1&p=10000&s=3&p=12&a=0&at=0>