



Skeuomorphs

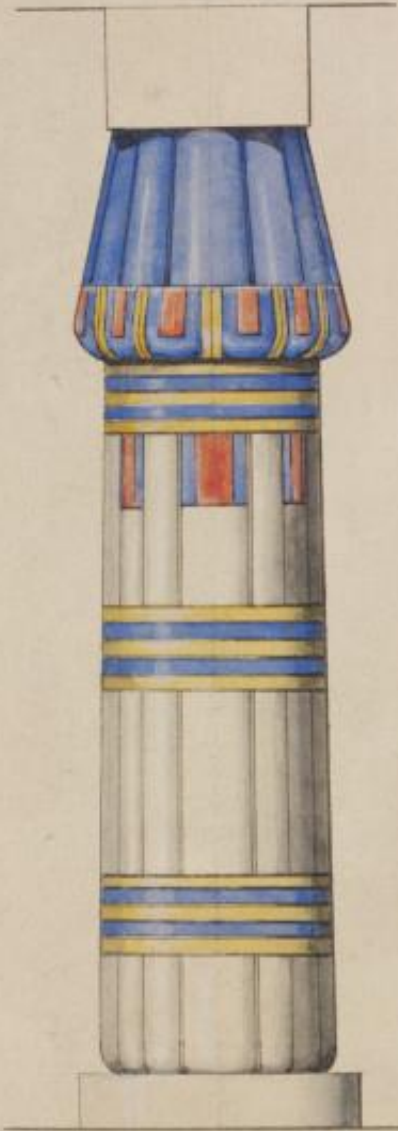




Woodhenge/Stonehenge



# The Nile/the Euphrates











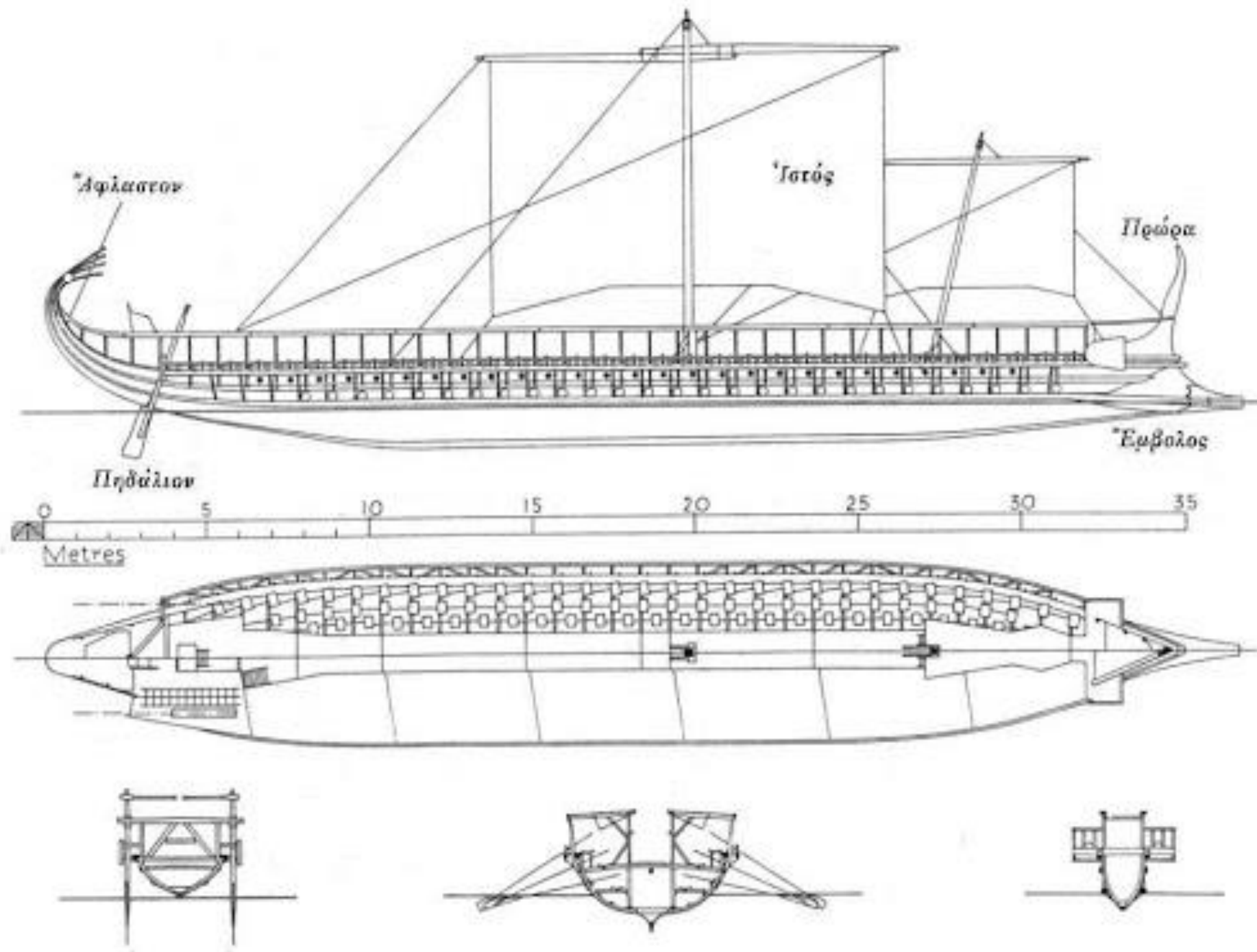
Trajan's Bridge Across The Danube



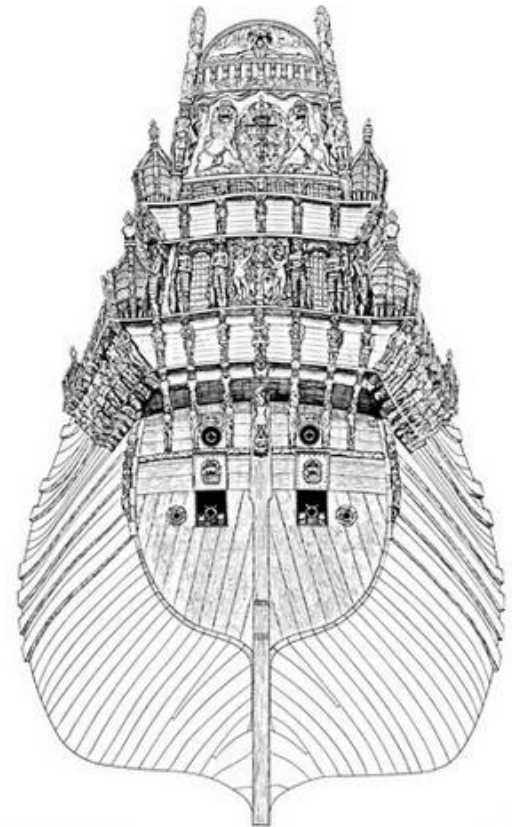
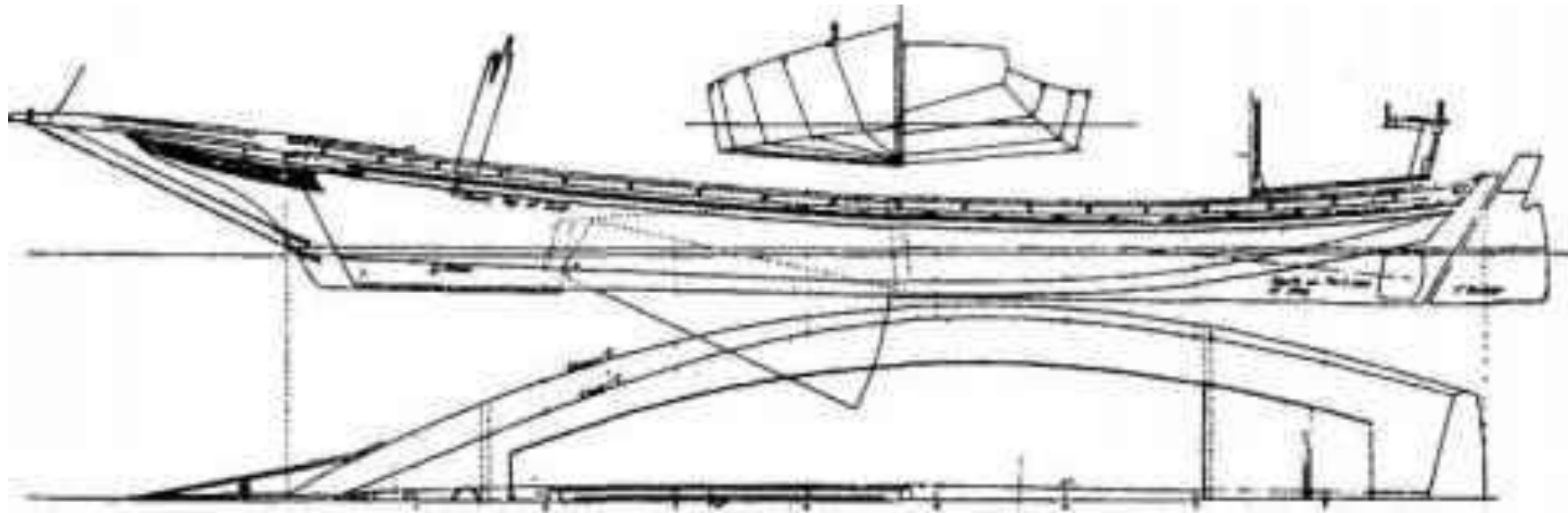
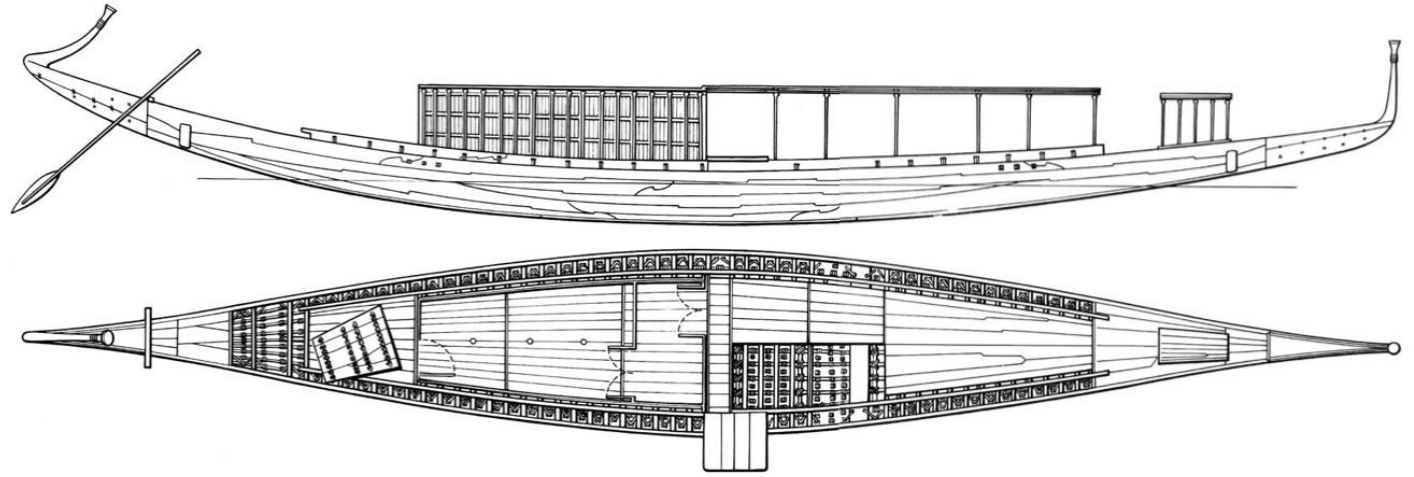
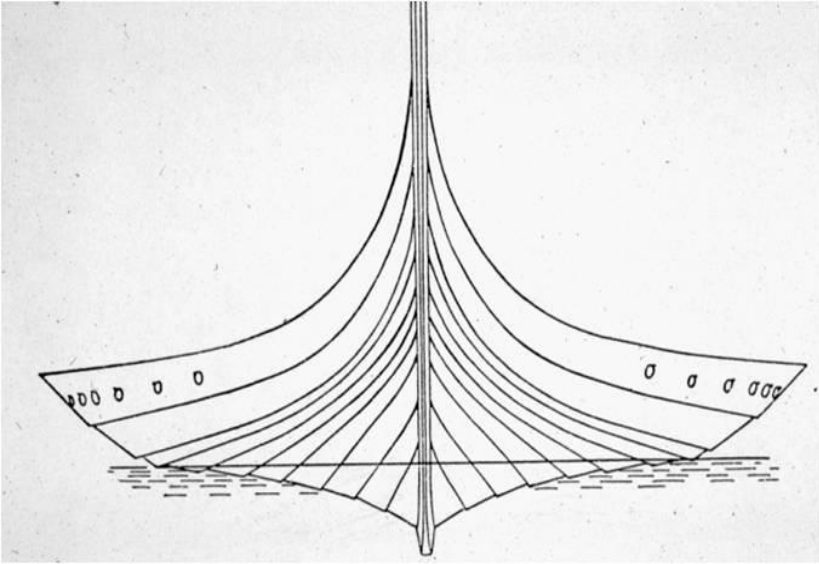
# Corbel Structures







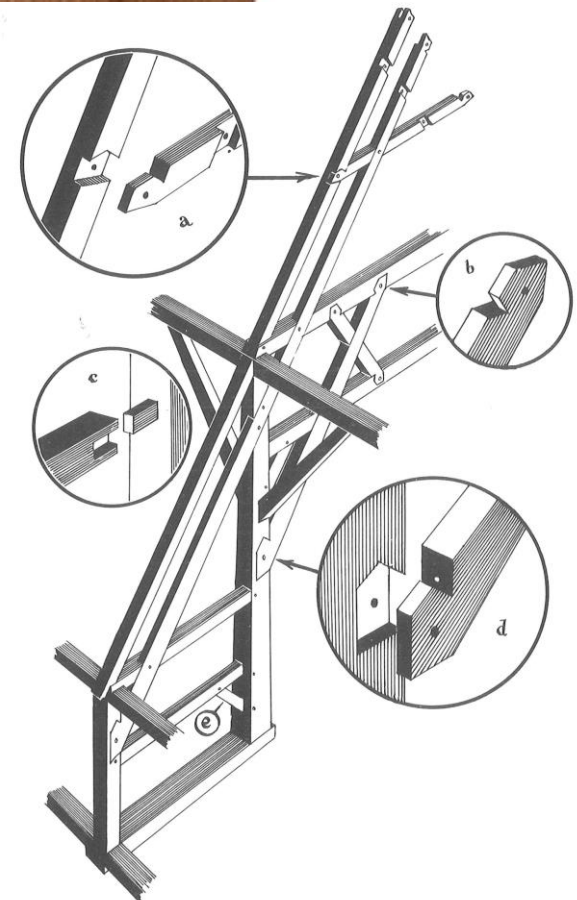
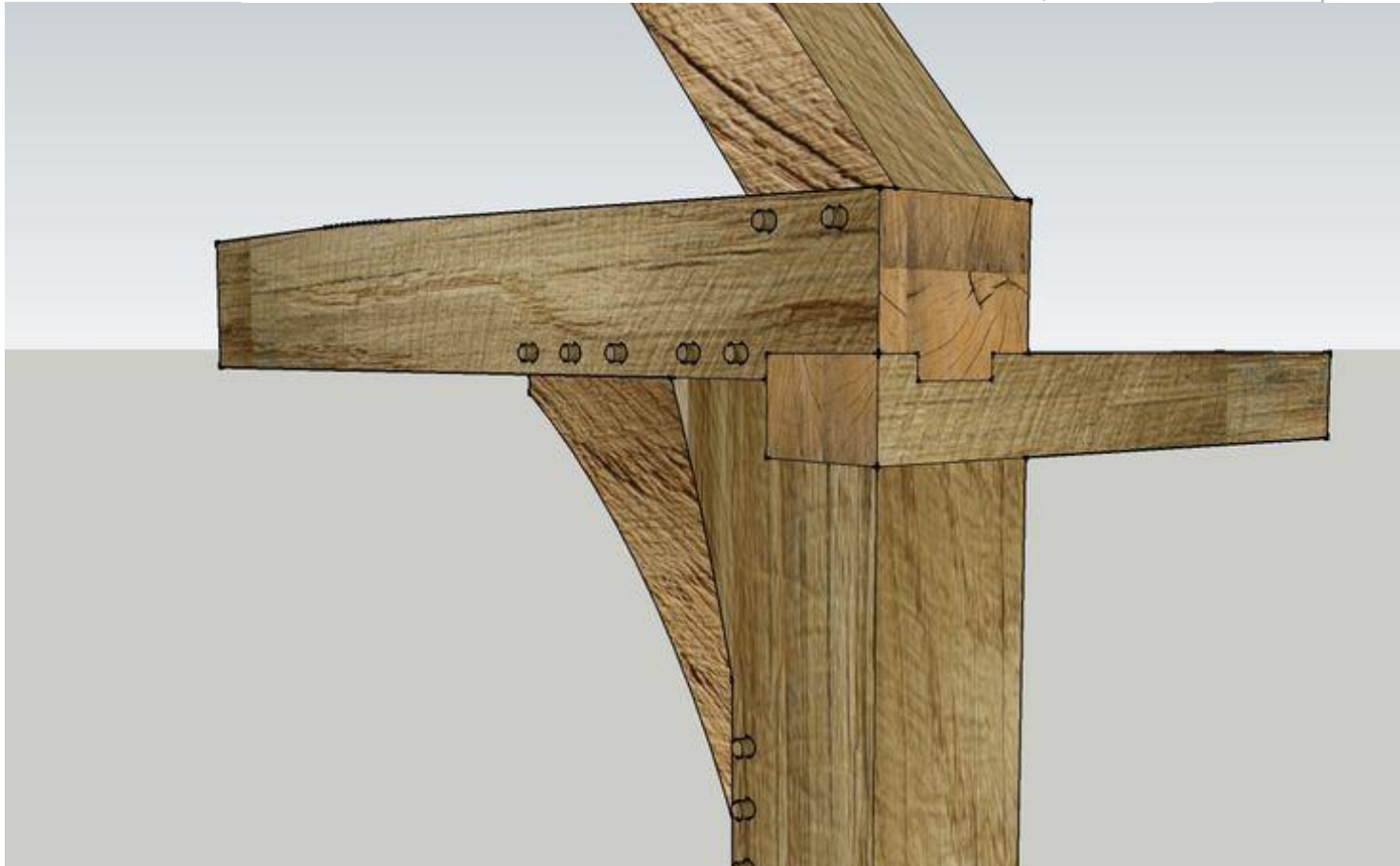
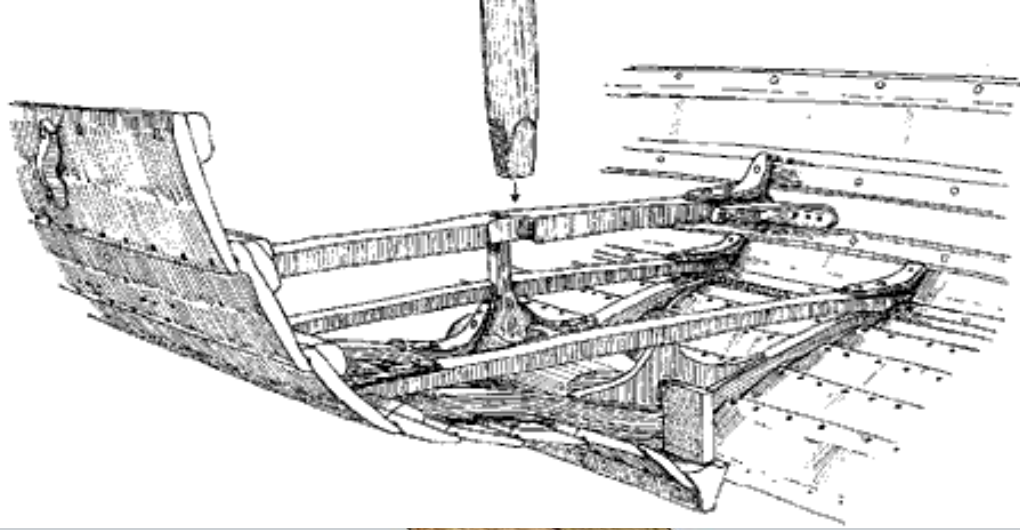




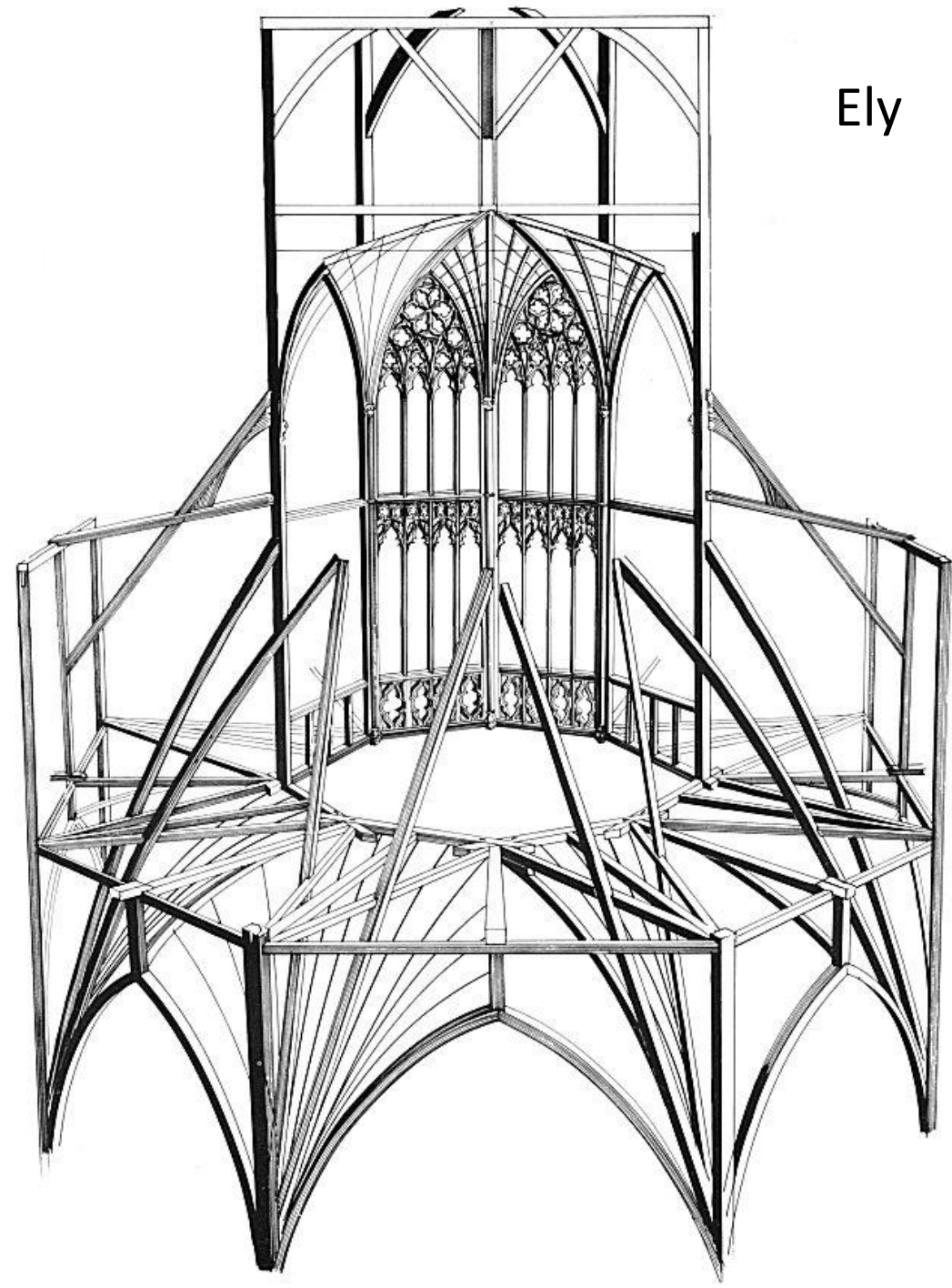
Boats



# Joints

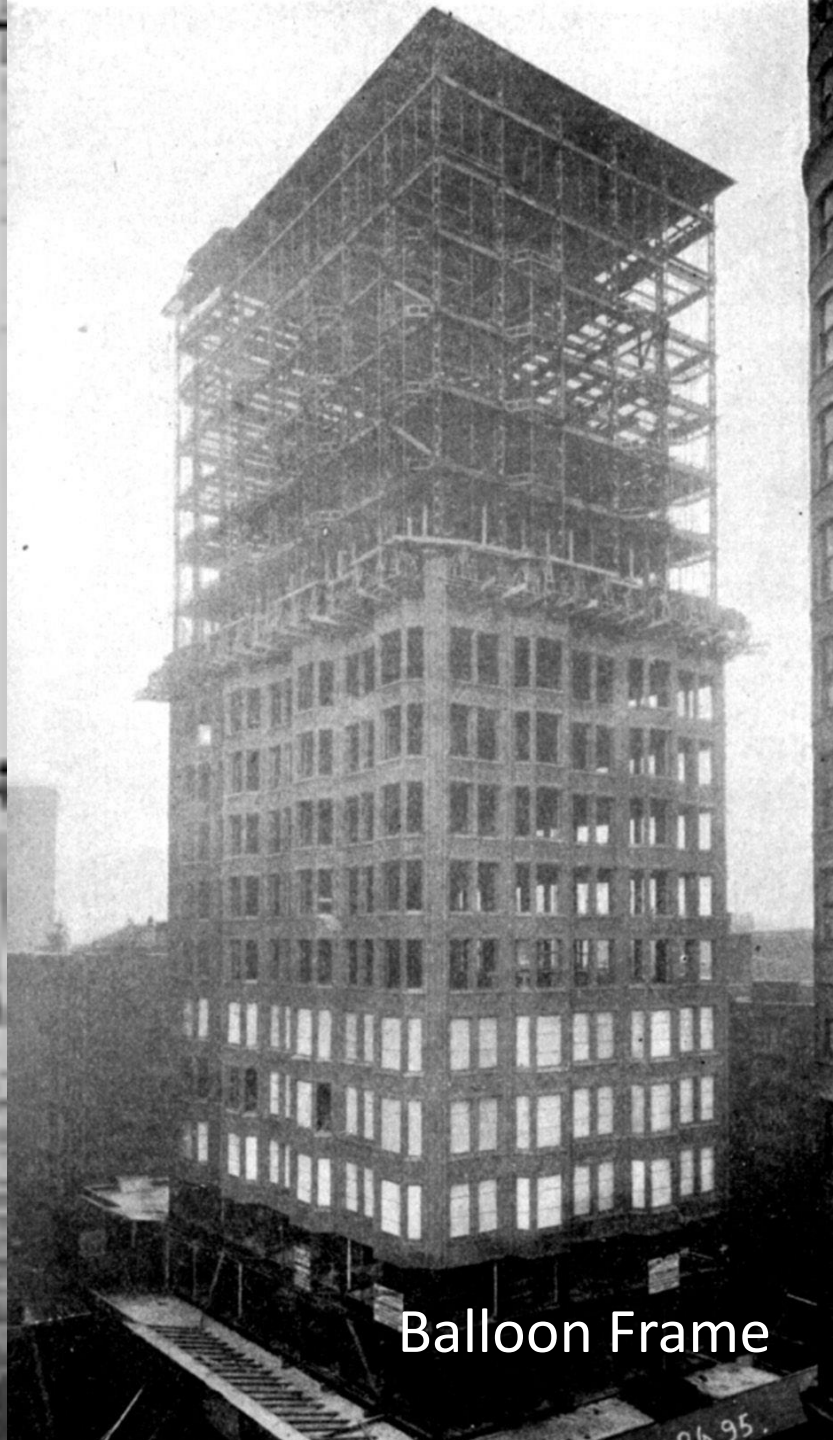




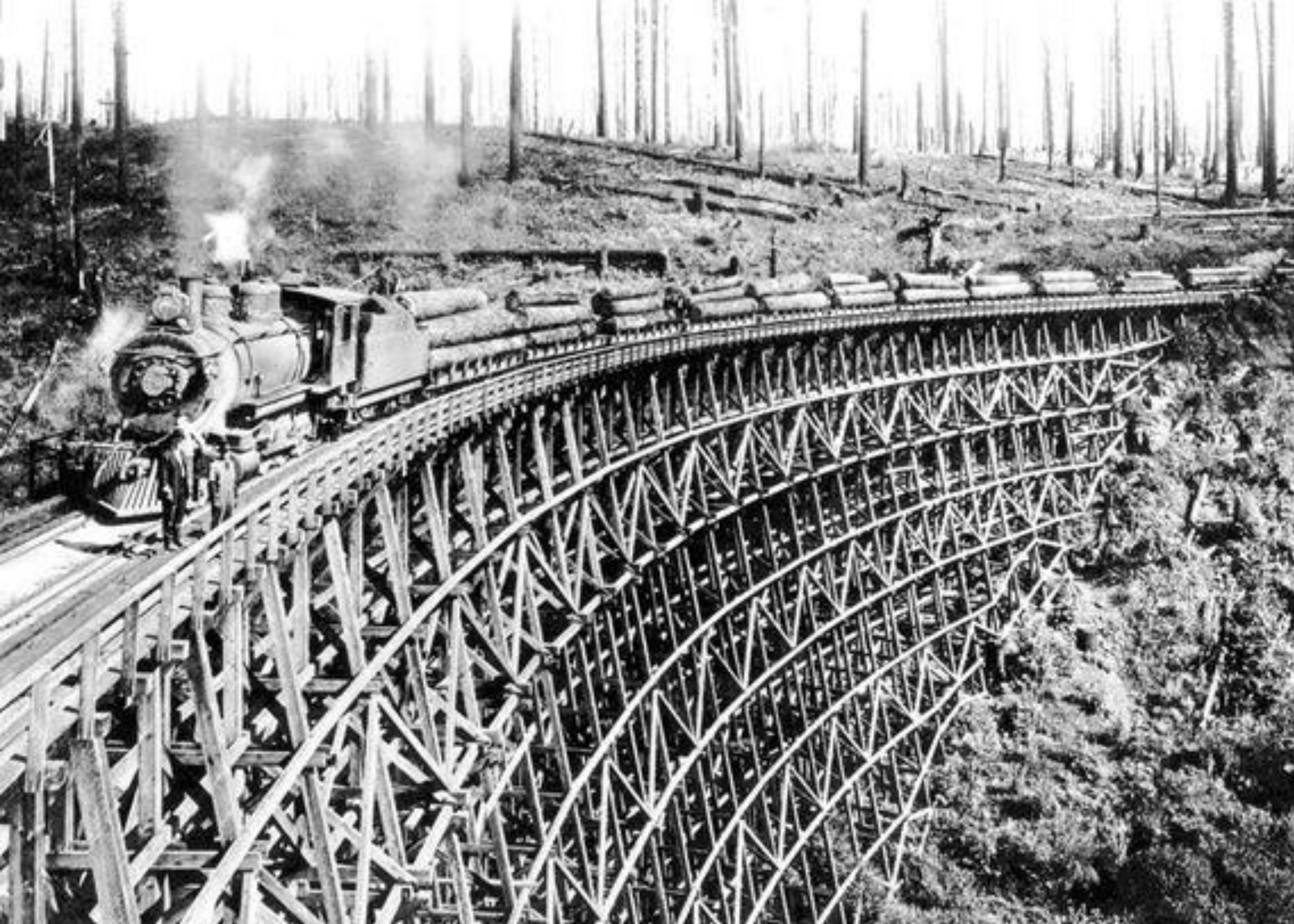


Ely





Balloon Frame



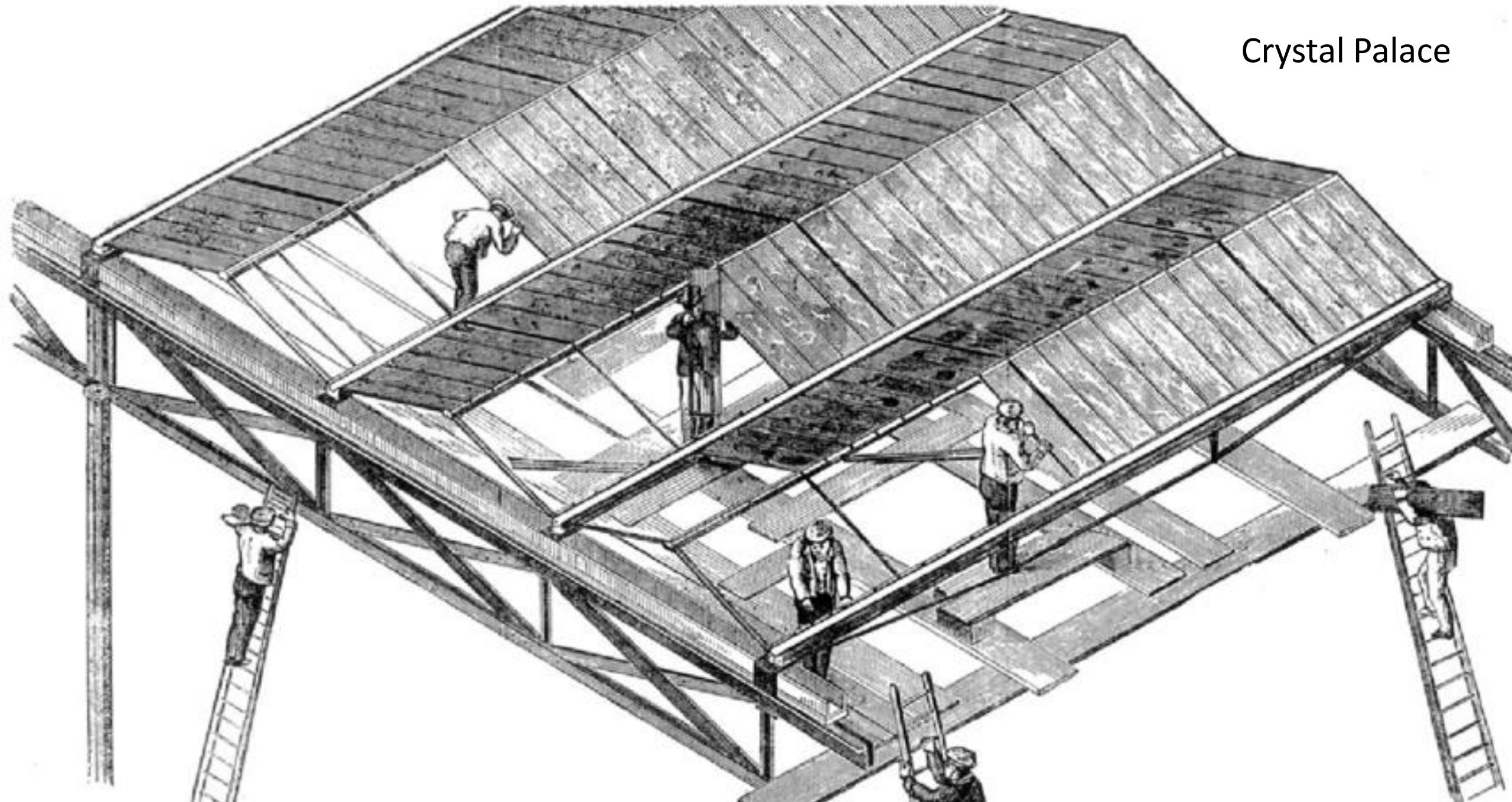
Railroad Trestle



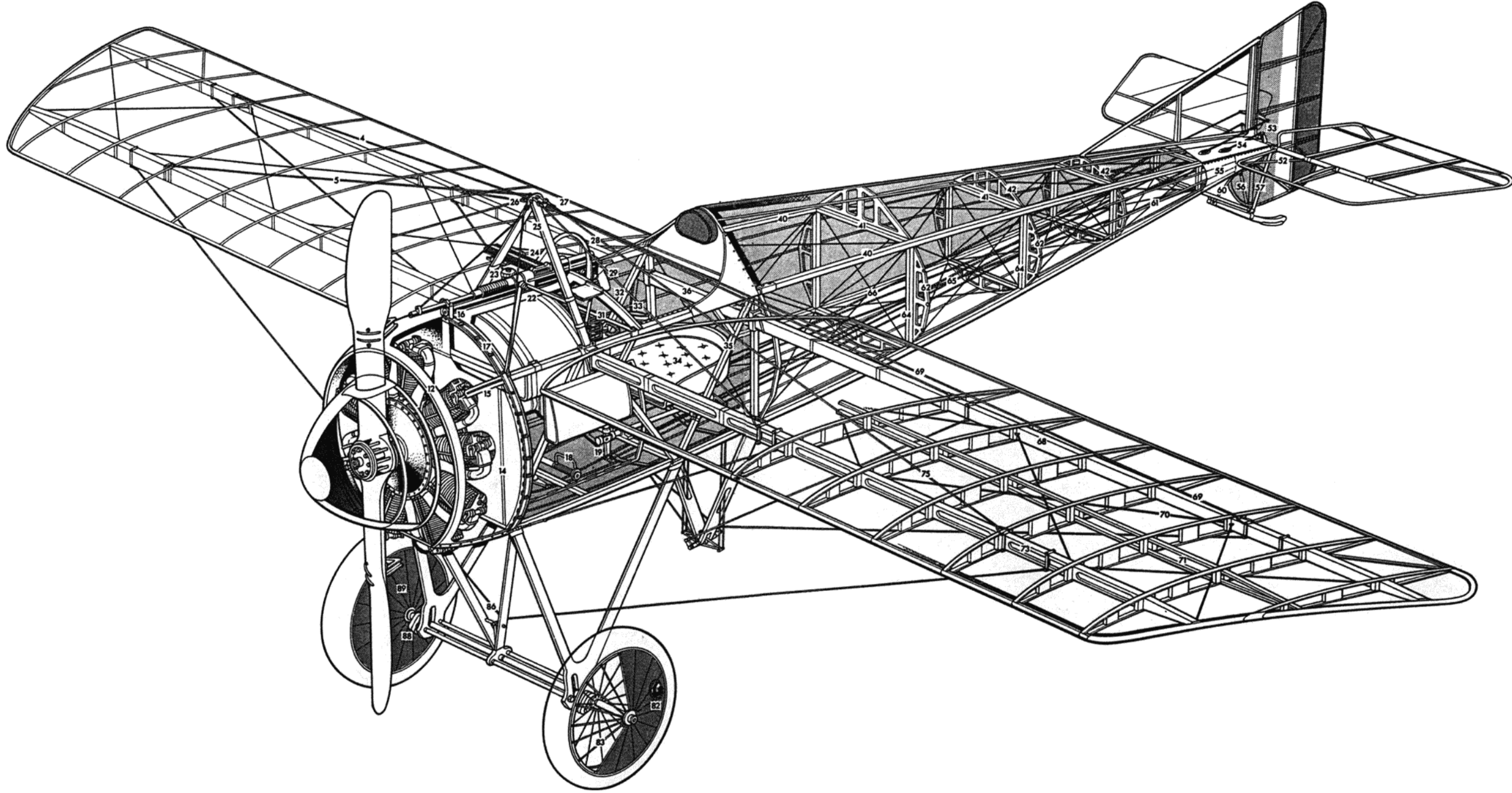




Crystal Palace

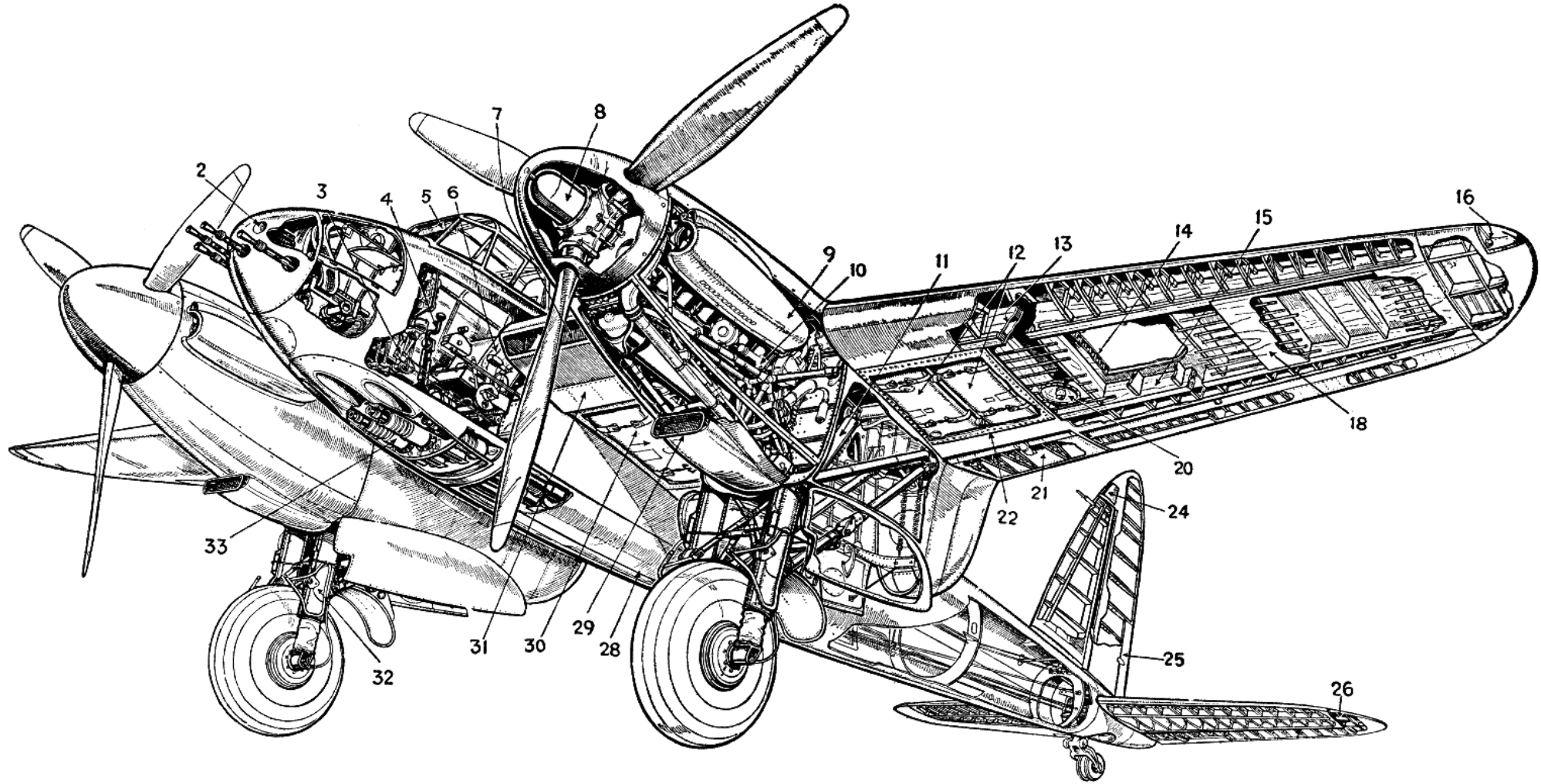






Morane Saunier

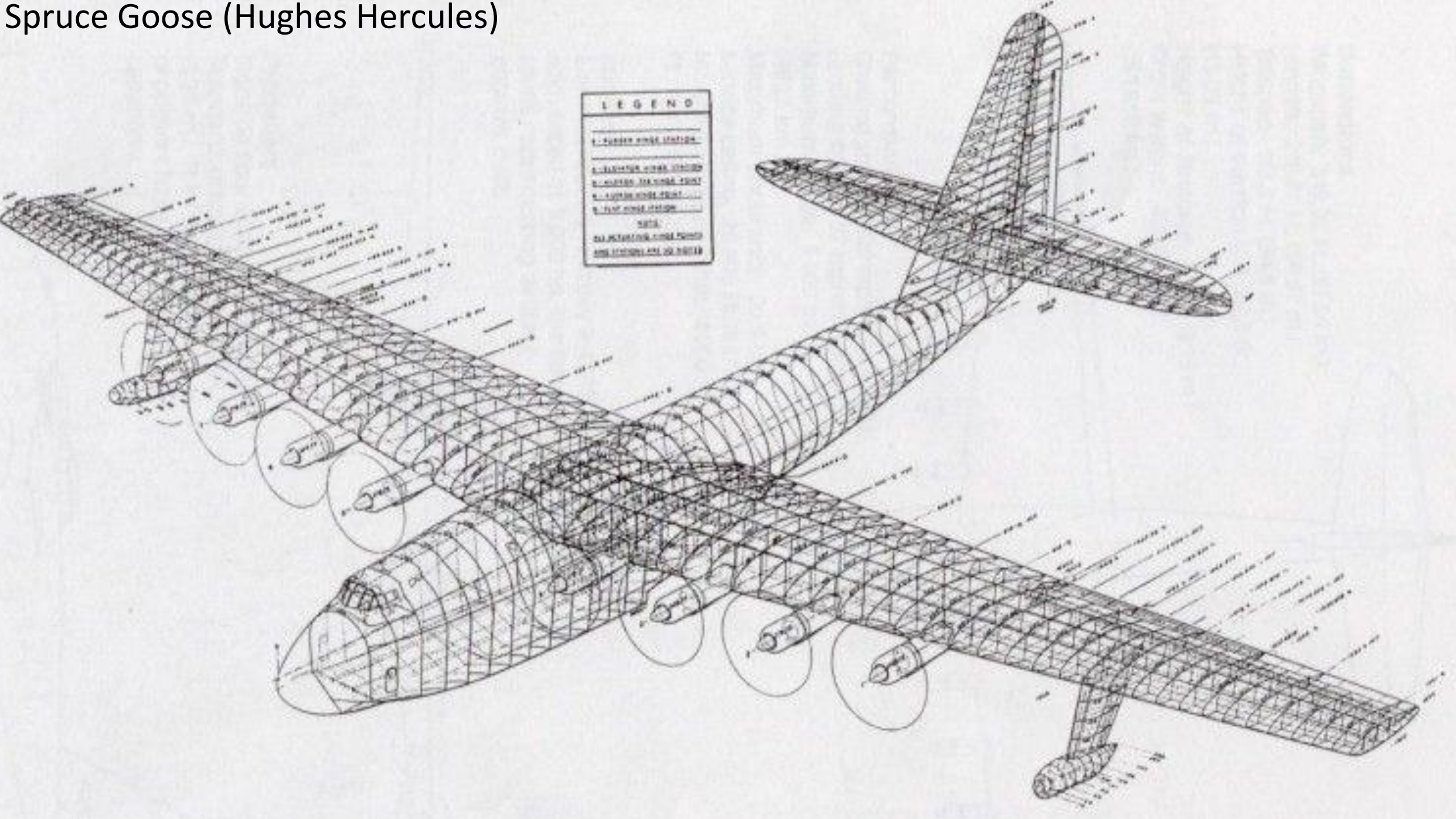




Mosquito



# Spruce Goose (Hughes Hercules)



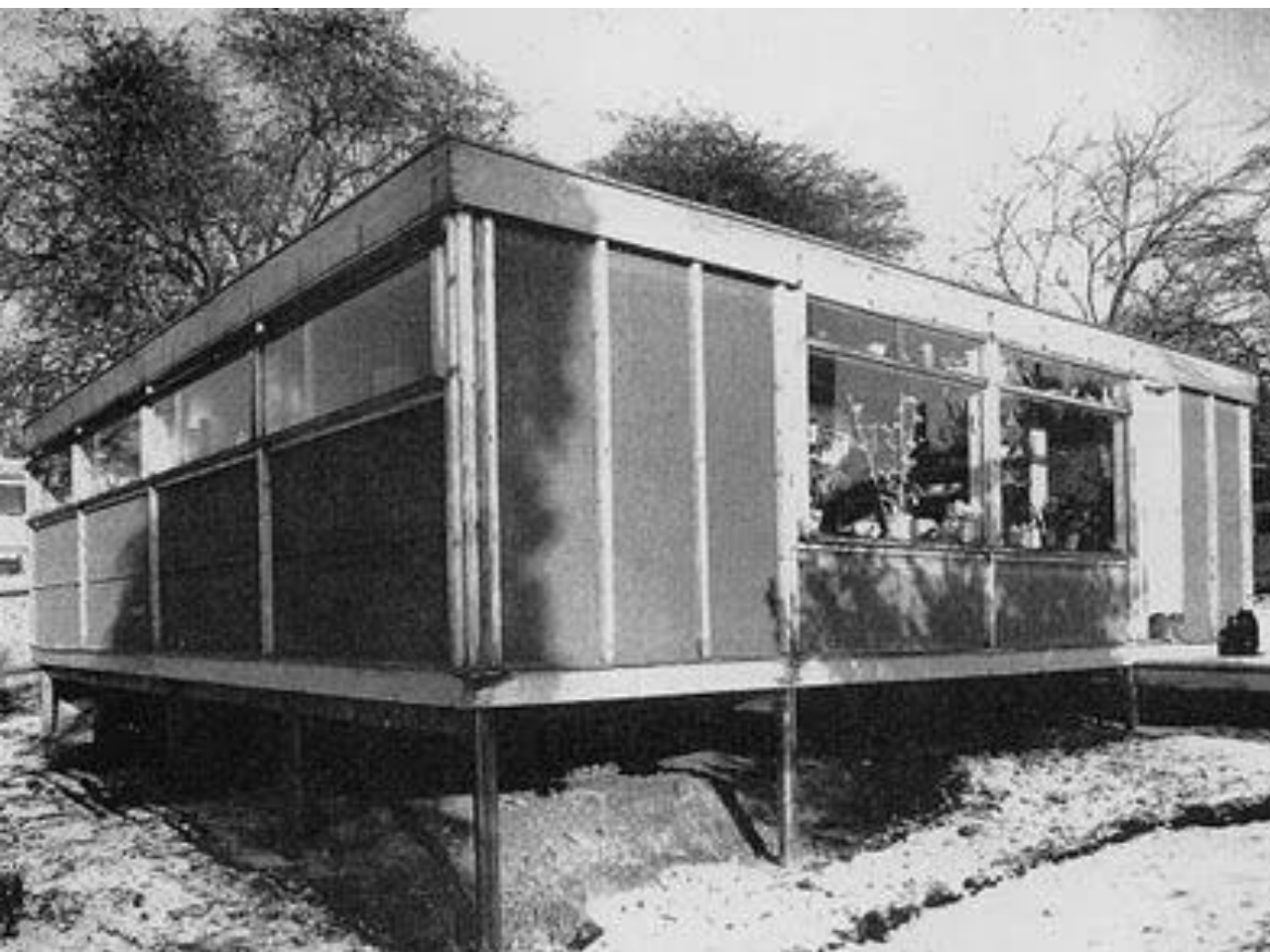












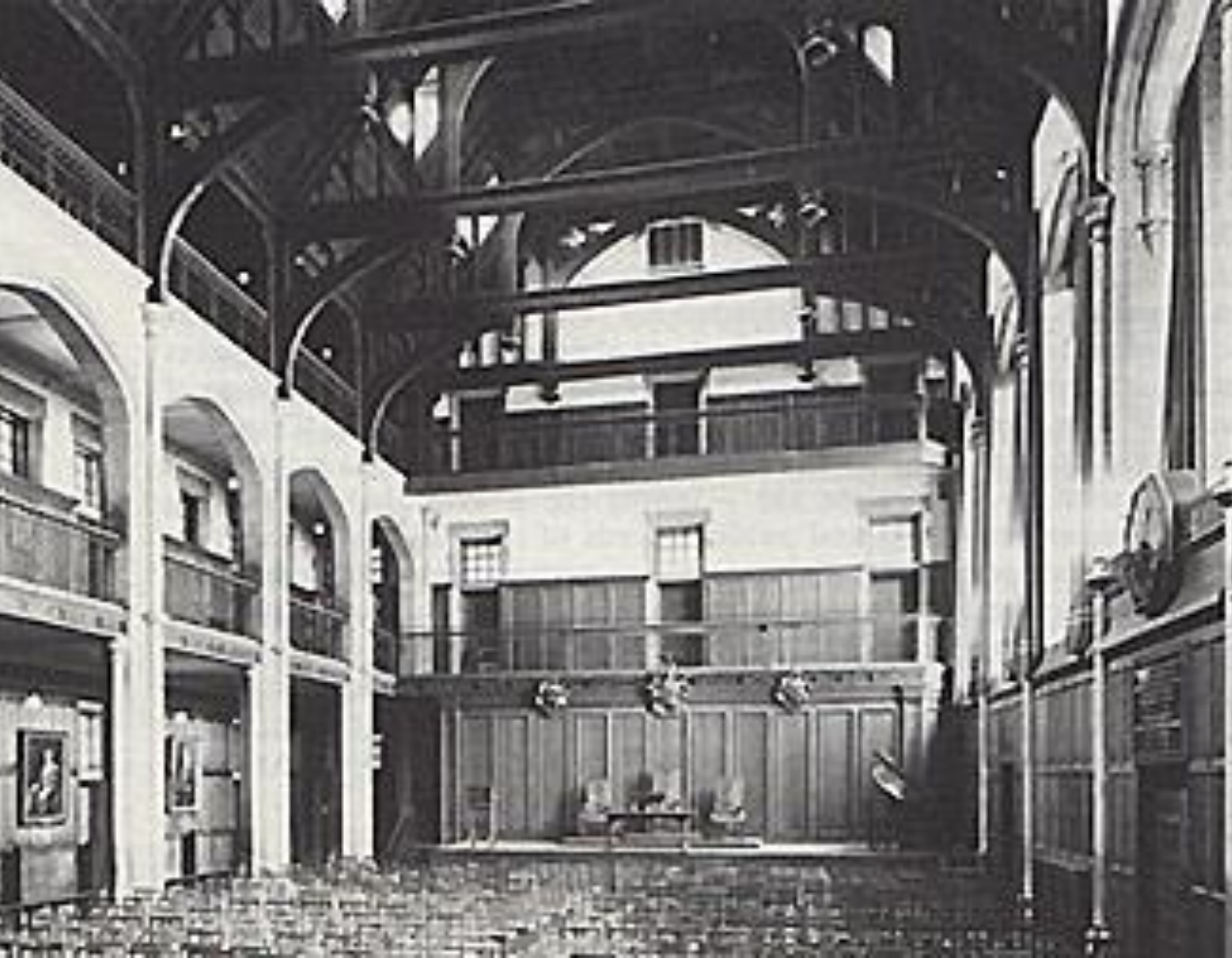
Seagal/Prouve





Bedford School





Bedford School







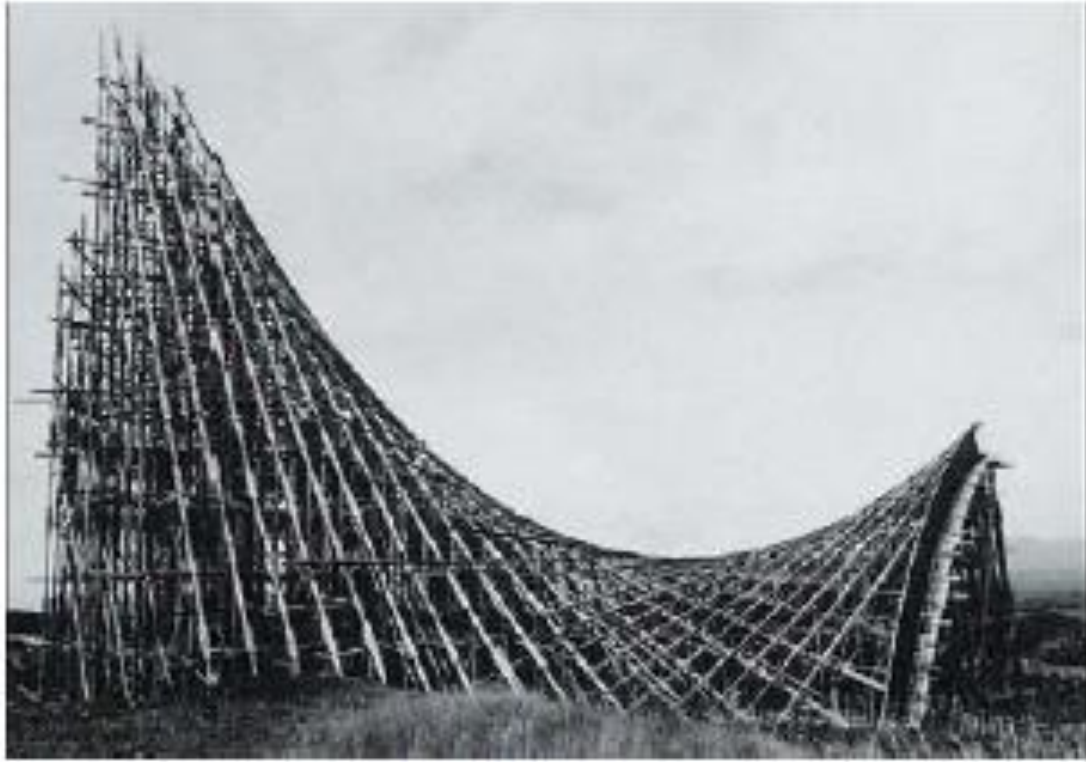


Flying Fifteen

























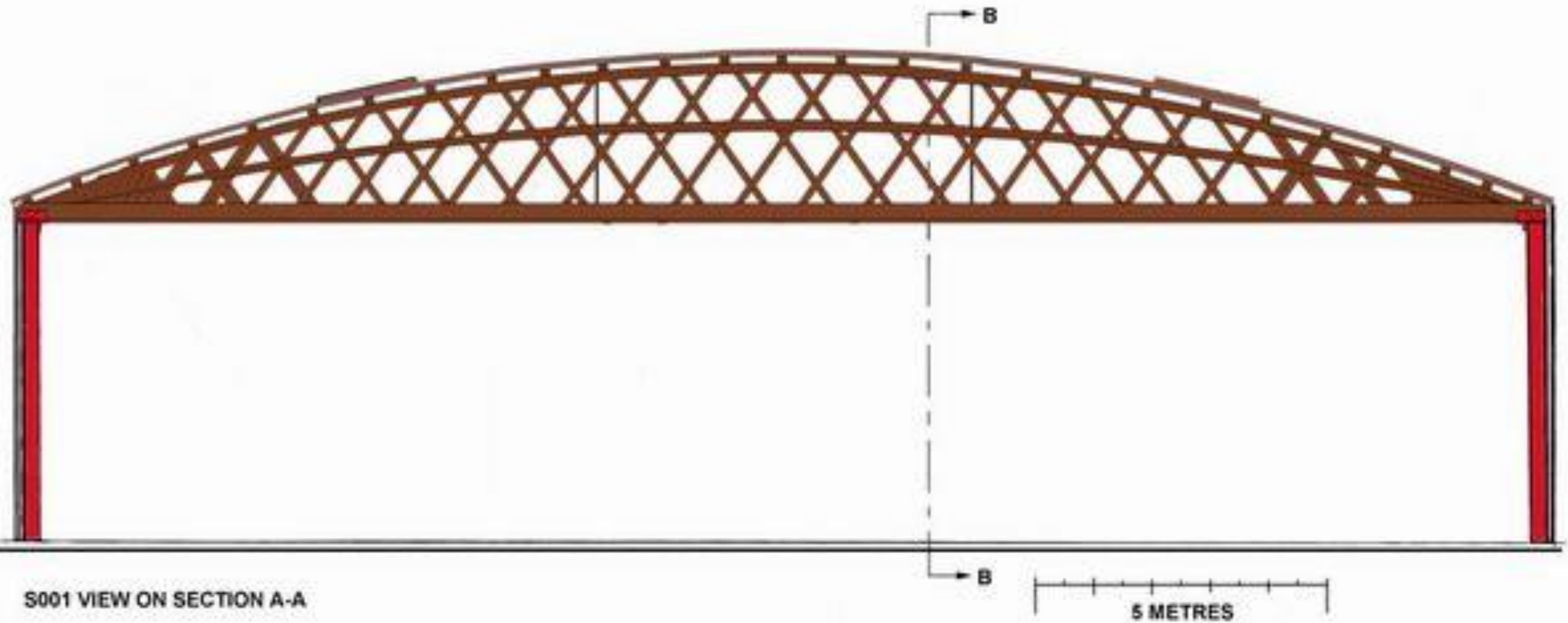












S001 VIEW ON SECTION A-A

BARTON AERODROME - HANGAR 2

Belfast Truss



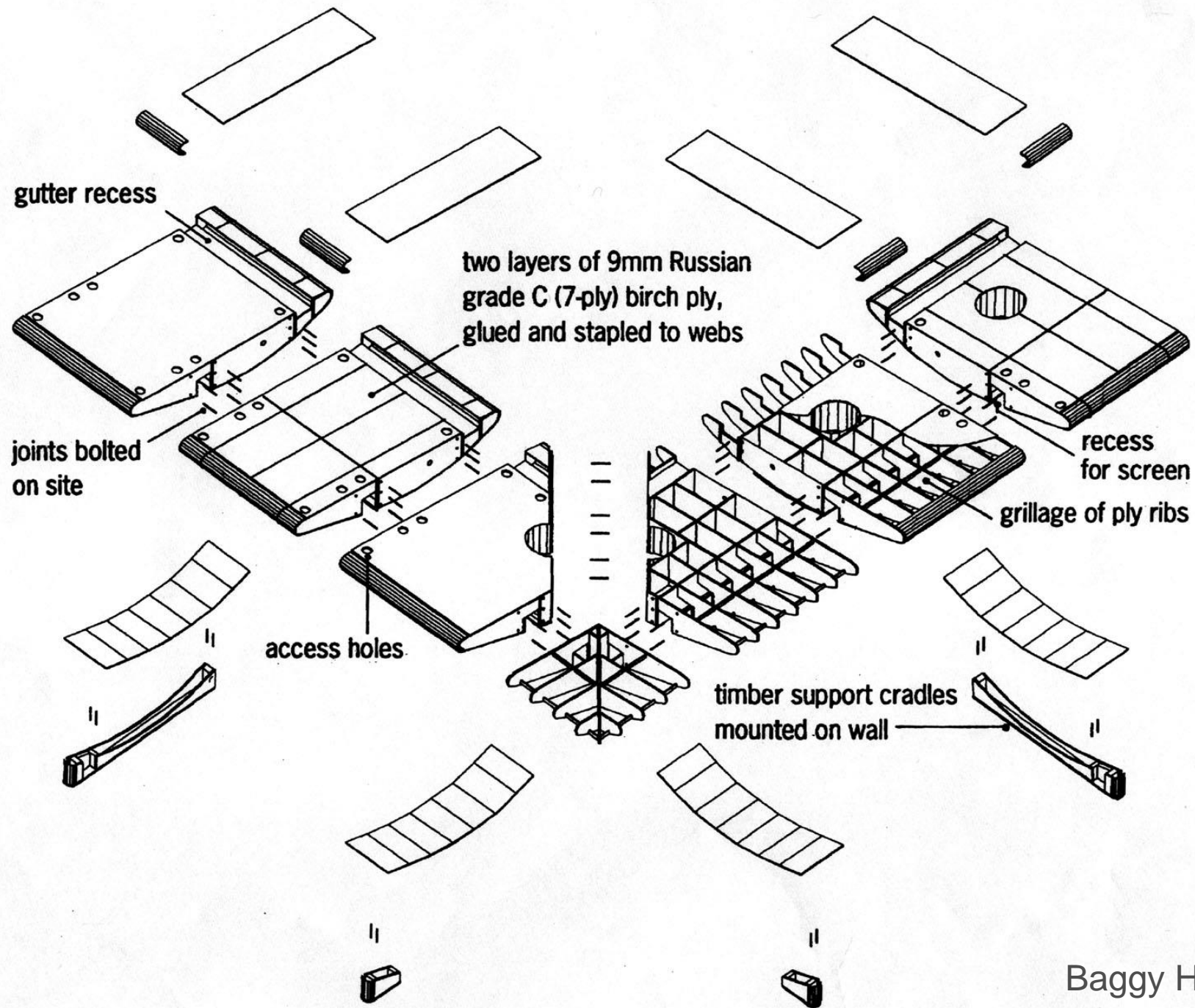






Baggy House









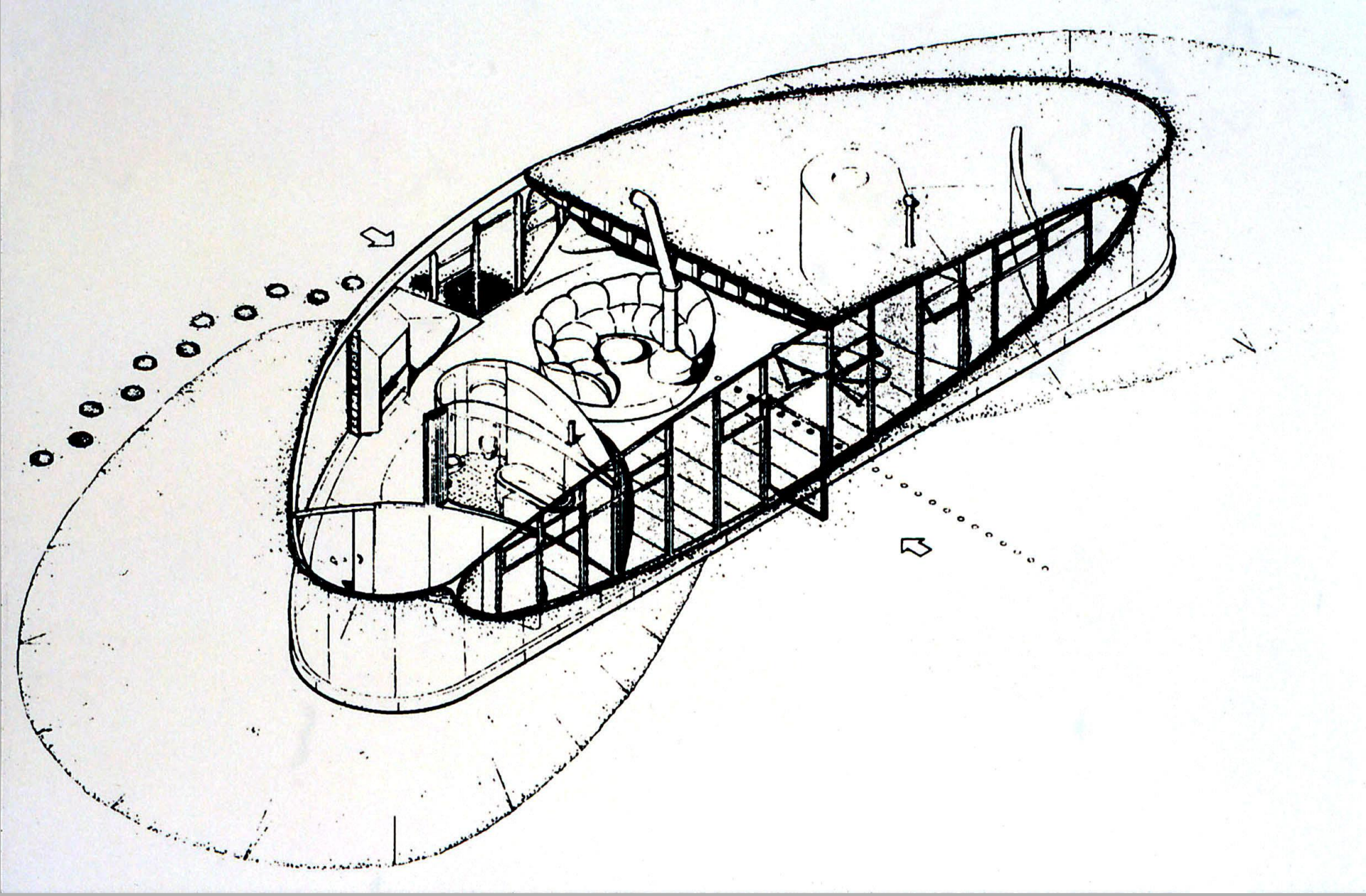
Druidstone Haven





Druidstone Haven



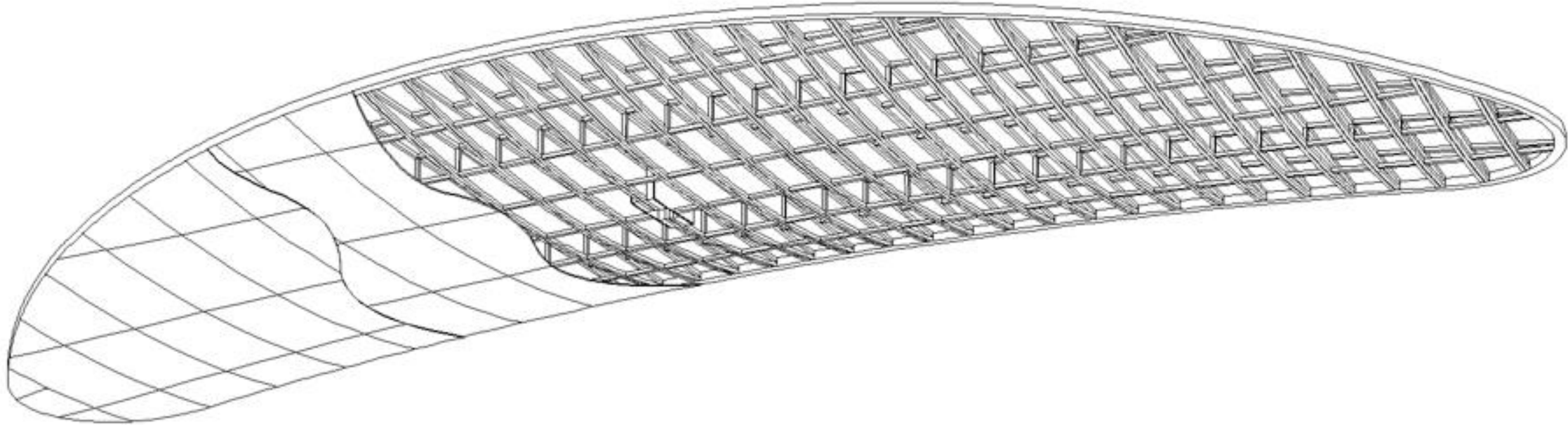


Druidstone Haven









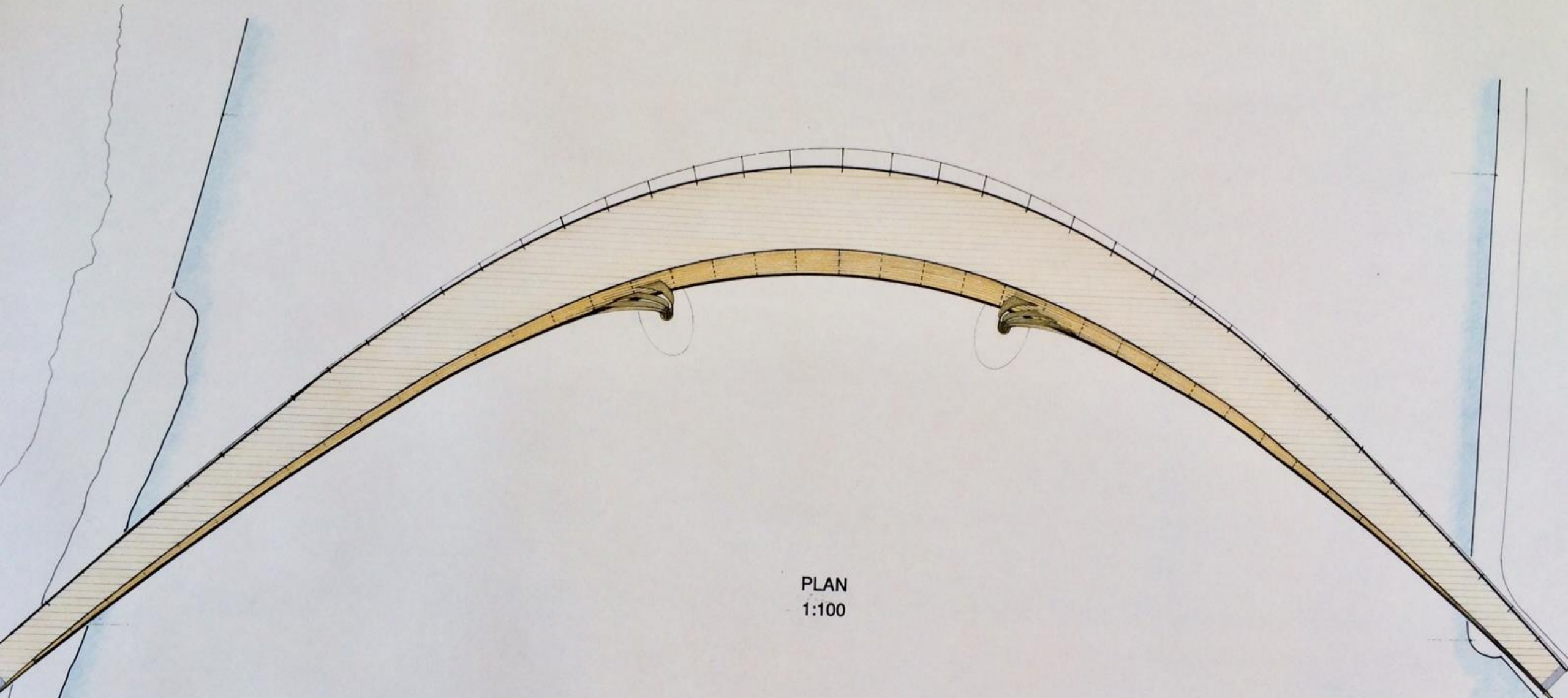




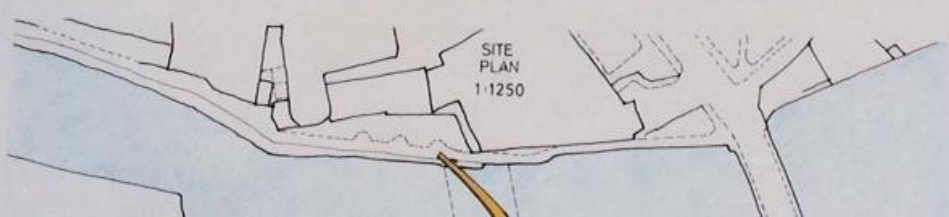
Druidstone Haven



ELEVATION  
1:100

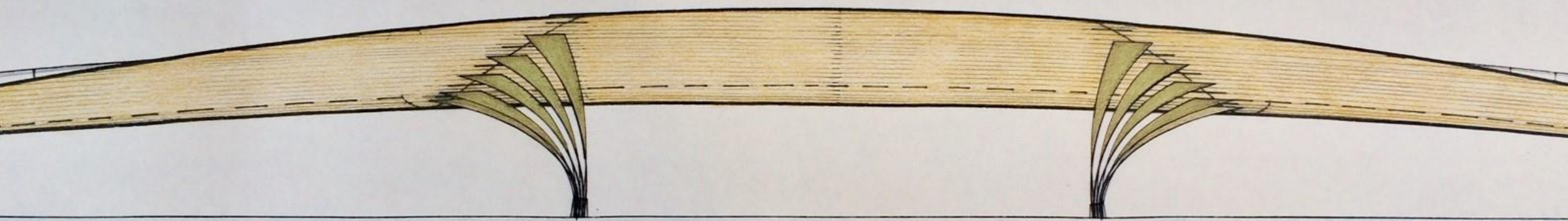


PLAN  
1:100



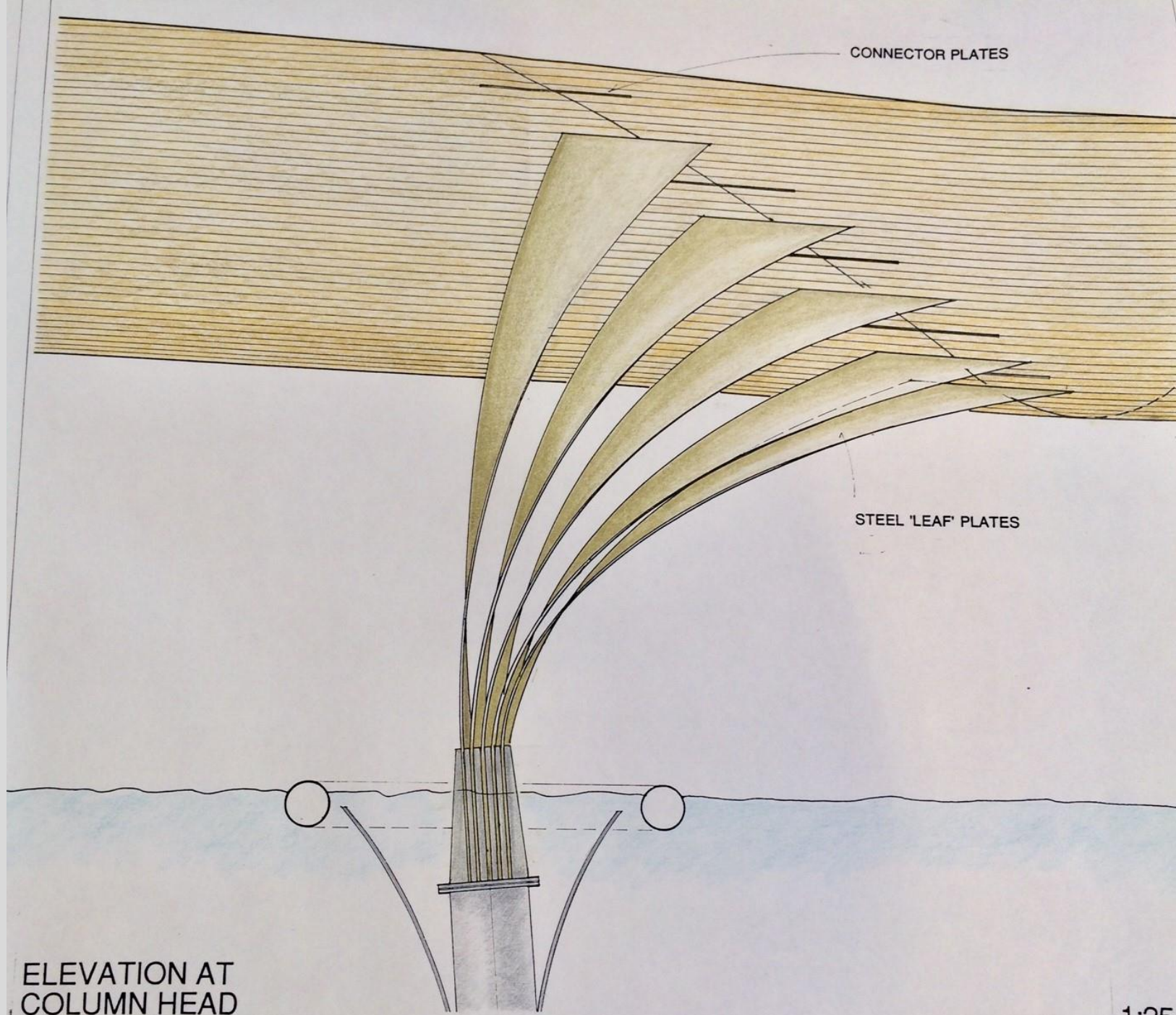
SITE  
PLAN  
1:1250





ELEVATION  
1:100





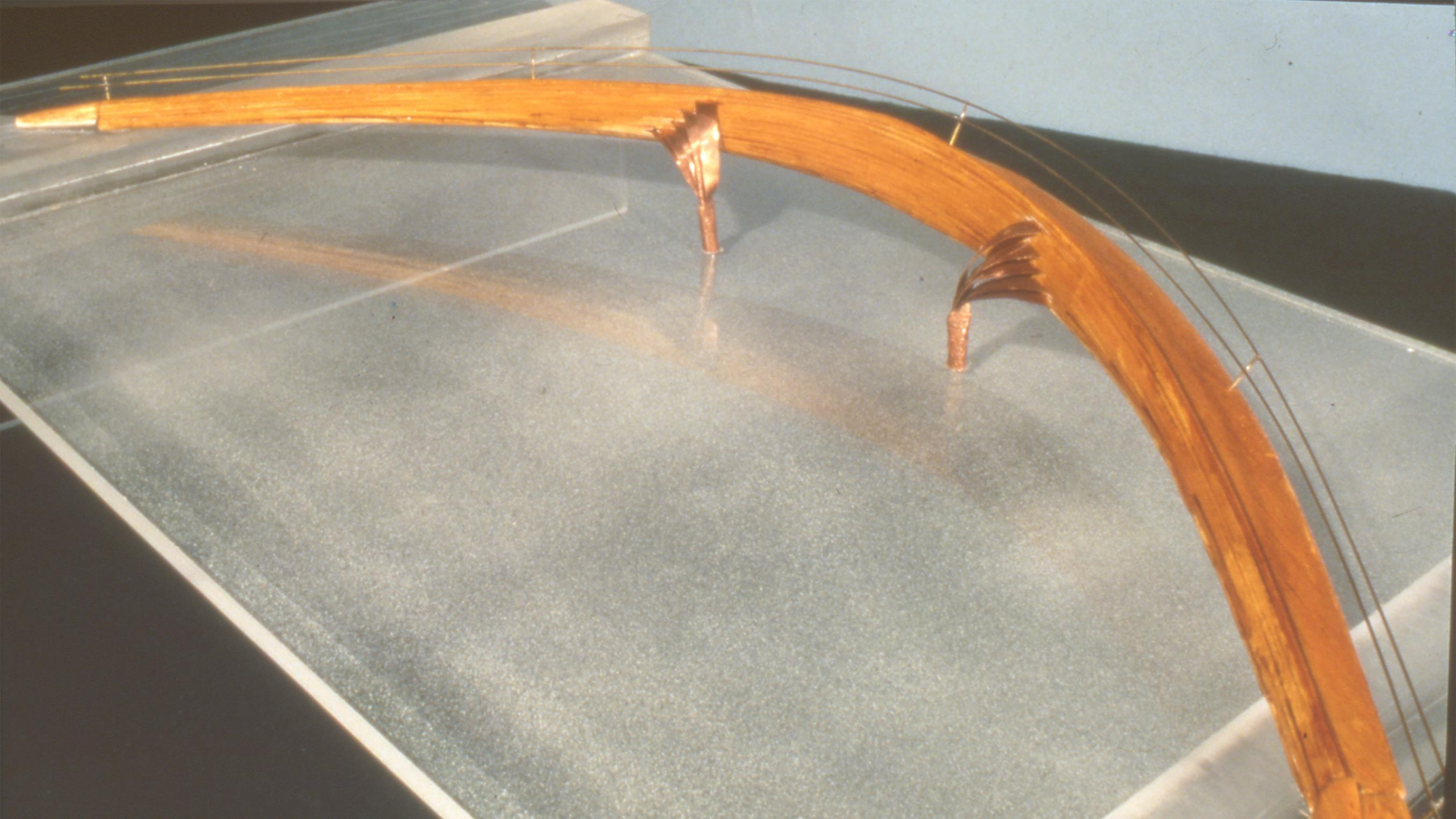
CONNECTOR PLATES

STEEL 'LEAF' PLATES

ELEVATION AT  
COLUMN HEAD

1:25



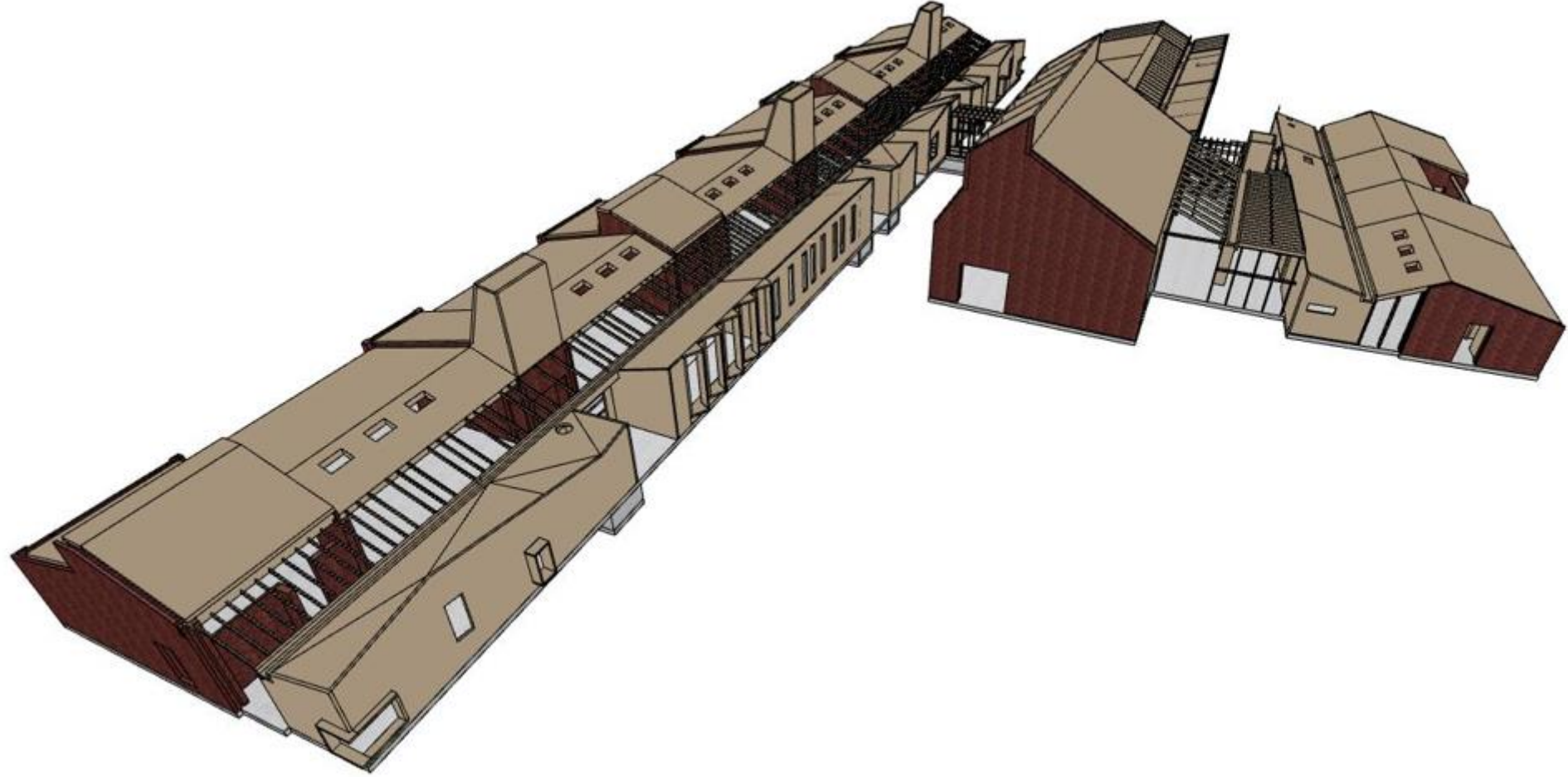






Sandal Magna School









Wellington Academy Roof Structure





Stadthaus



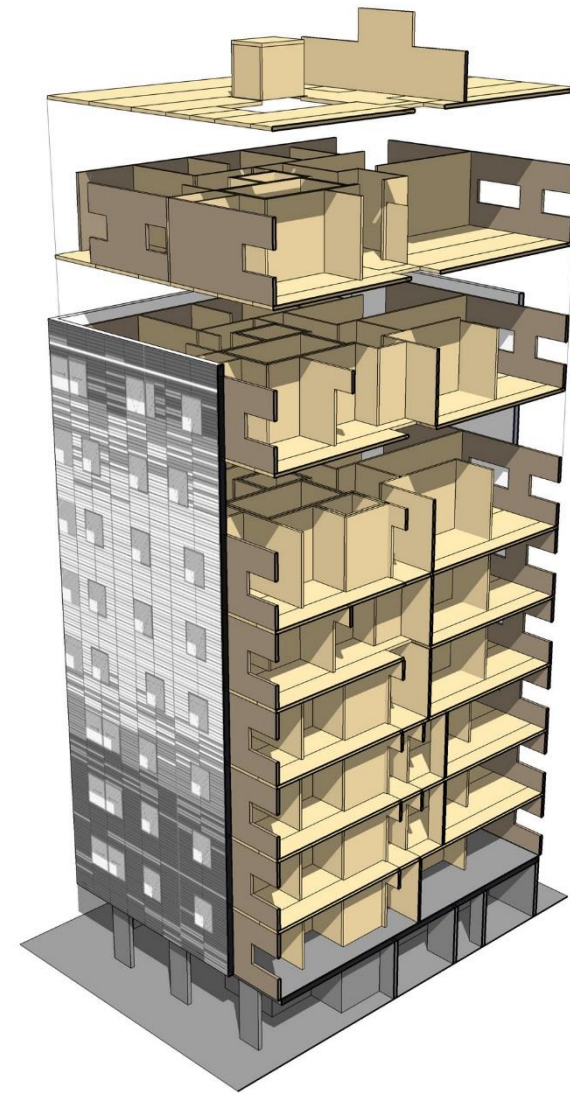
# Outline

Eight storeys of cross laminated timber onto RC podium slab at first floor.

Mixture of private and social housing with separate access.

Cellular construction.

A carbon positive footprint over a twenty year period.

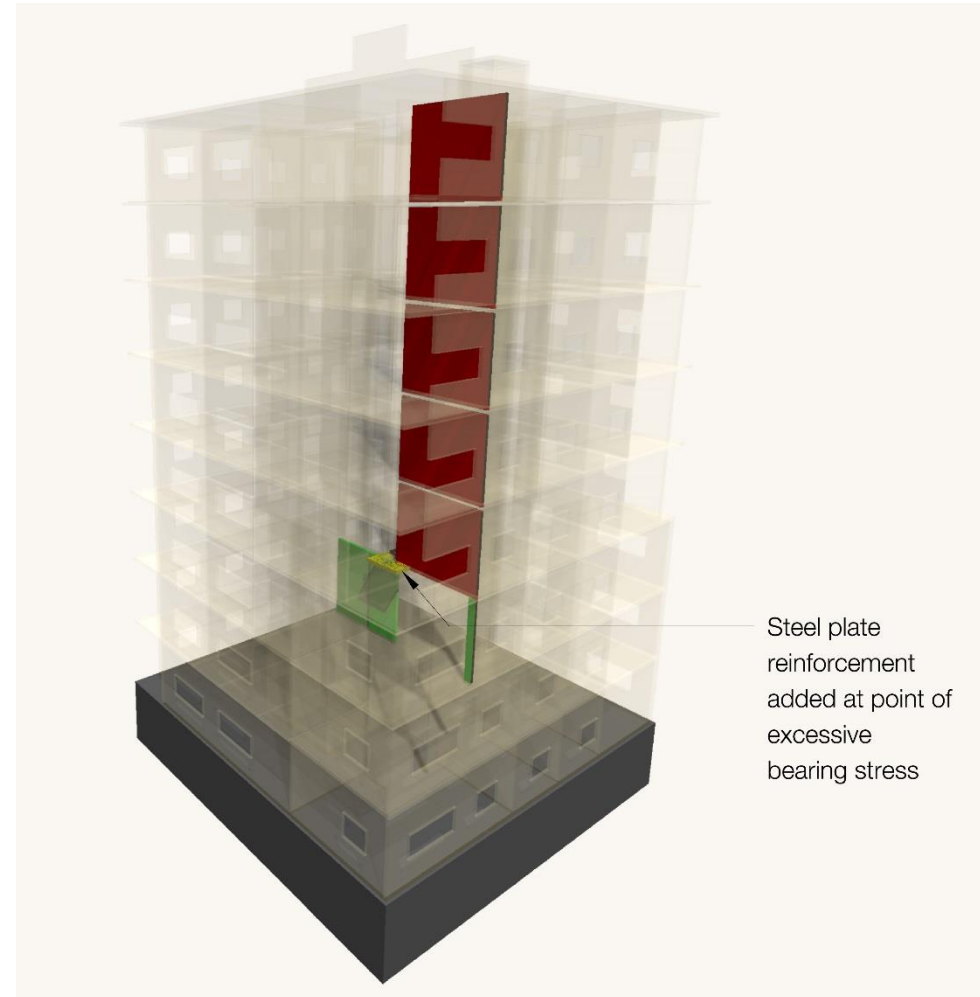


Stadthaus



# Weak point

Load bearing stiffeners added



Taller timber buildings



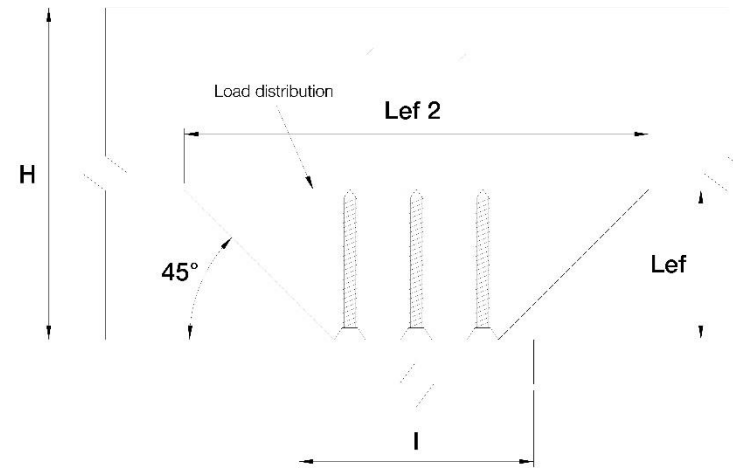


Stadthaus



# The weak link

Local strengthening may achieve another two or three storeys?



Taller timber buildings



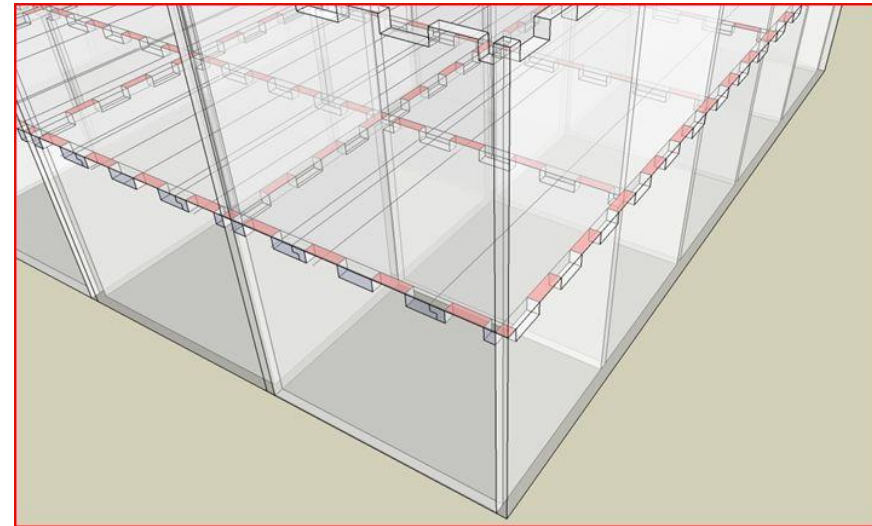
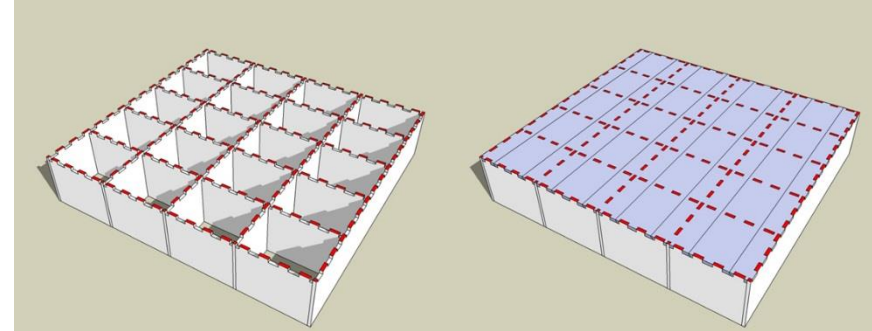
# The weak link

Or - Jigsaw' construction to bypass 'weak link'

Castellated wall panels

Holes cut in floor panels...

Wall panels over bear onto wall panels below



Taller Timber Buildings





Stadthaus



# Lift shaft

Lift shaft constructed in CLT and separated from main structure to reduce noise transmission.

Free standing cantilevers at four and eight storeys.

Connections were designed to be simple and repetitive to minimise the amount of checking on site.







Substitution of RC to timber offered  
Sufficient savings for client to begin project

Focus House





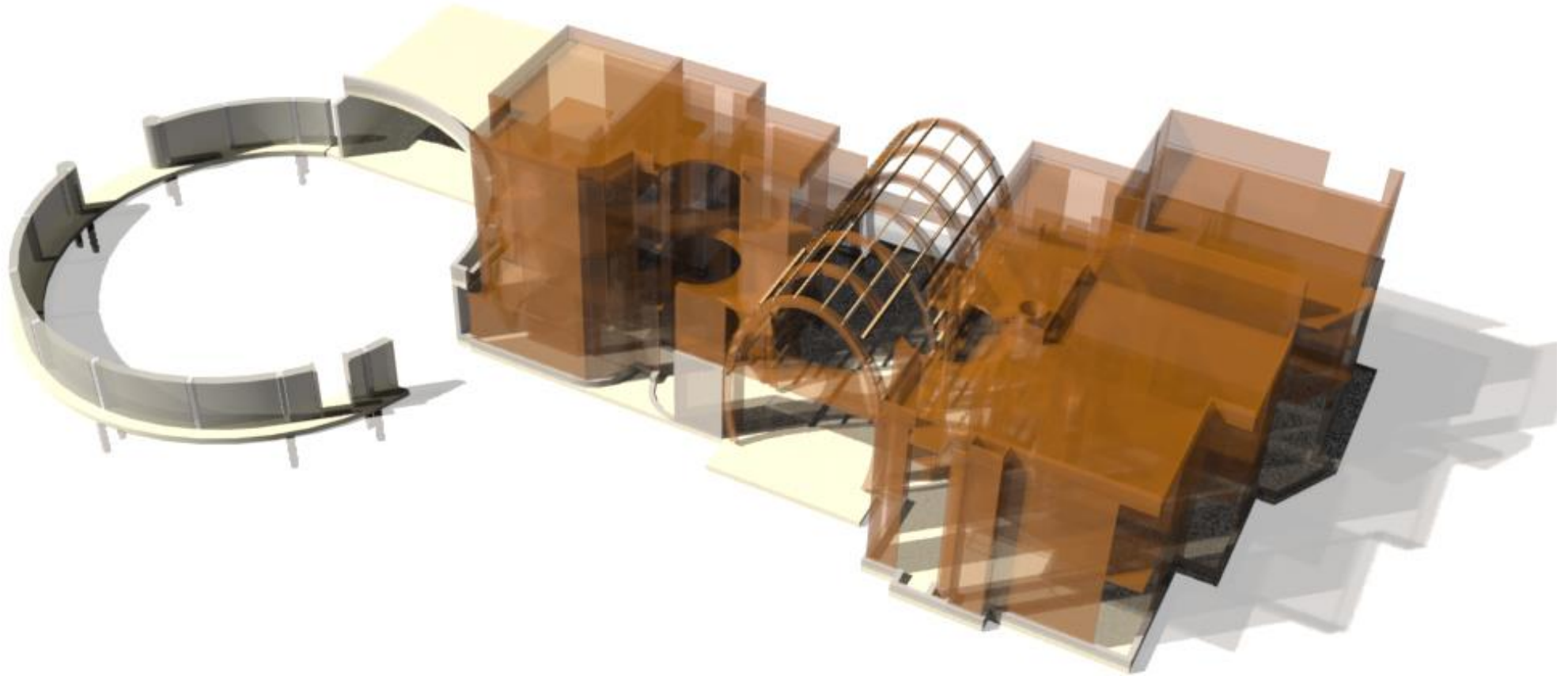
Focus House





Downley House





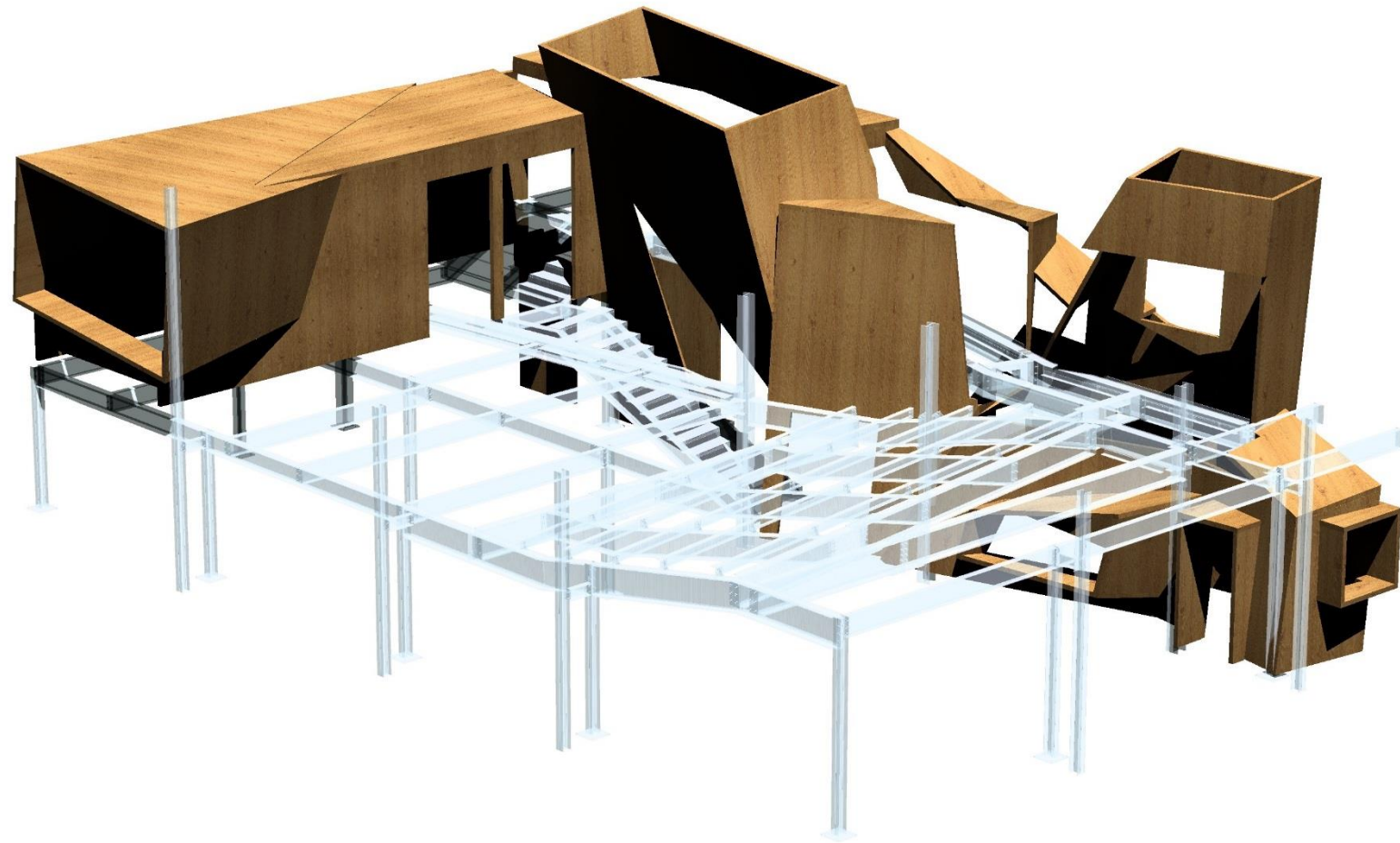
Downley House





Birkbeck College, Film Studies Centre





Panel cutting process (CNC) allows complex geometries to be exploited

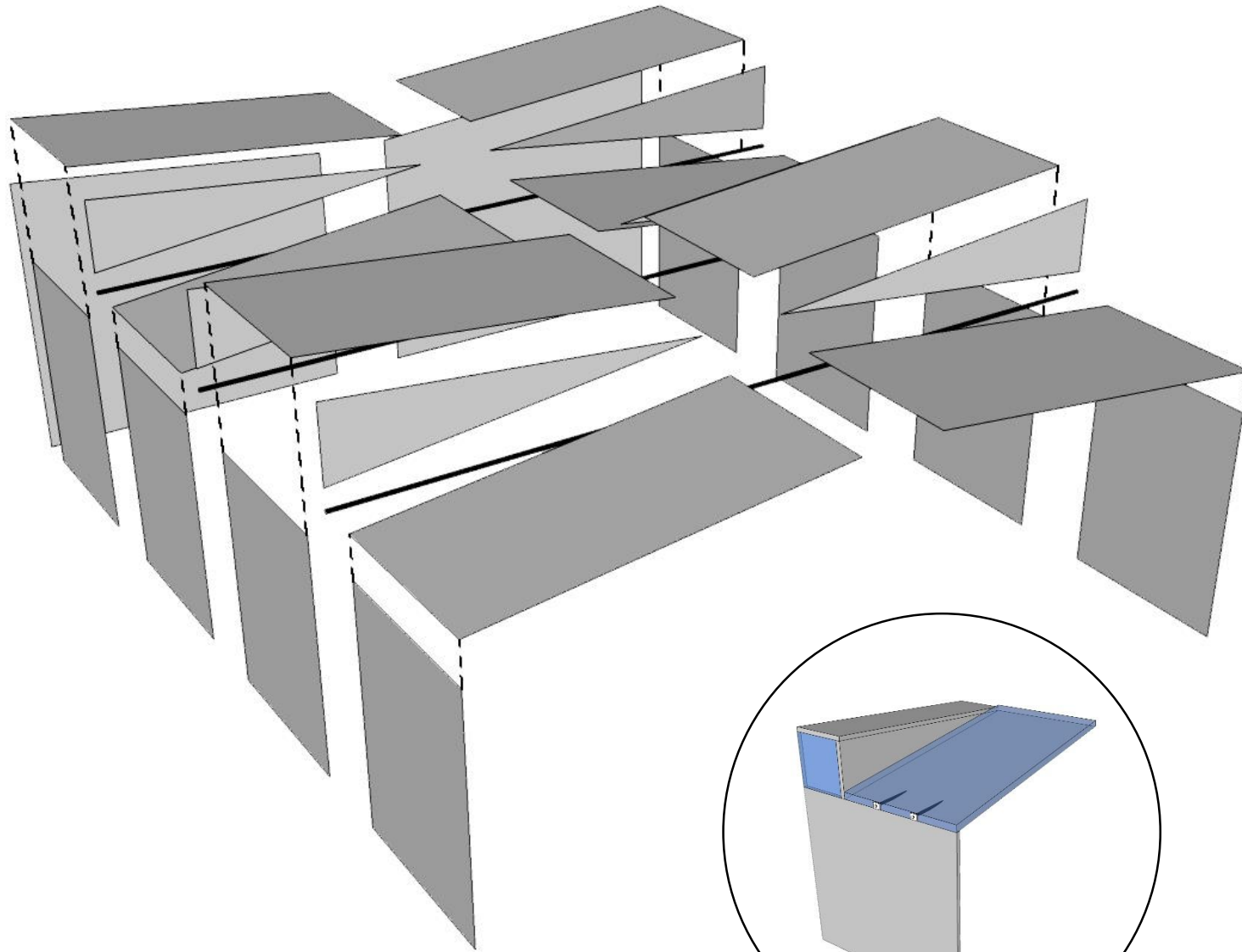
Birkbeck College, Film Studies Centre



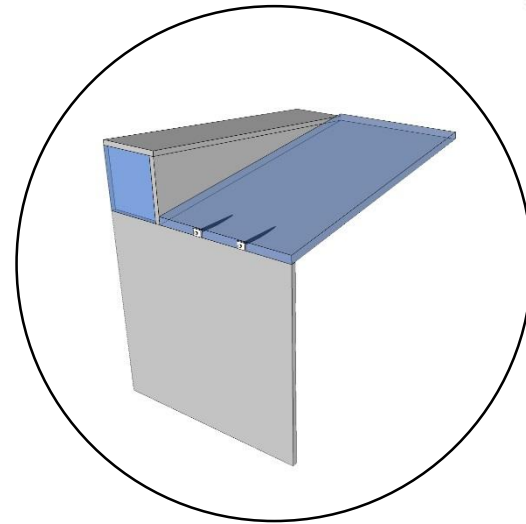


Salvation Army





Simple pairing of panels  
support the roof with tie bars



Salvation Army





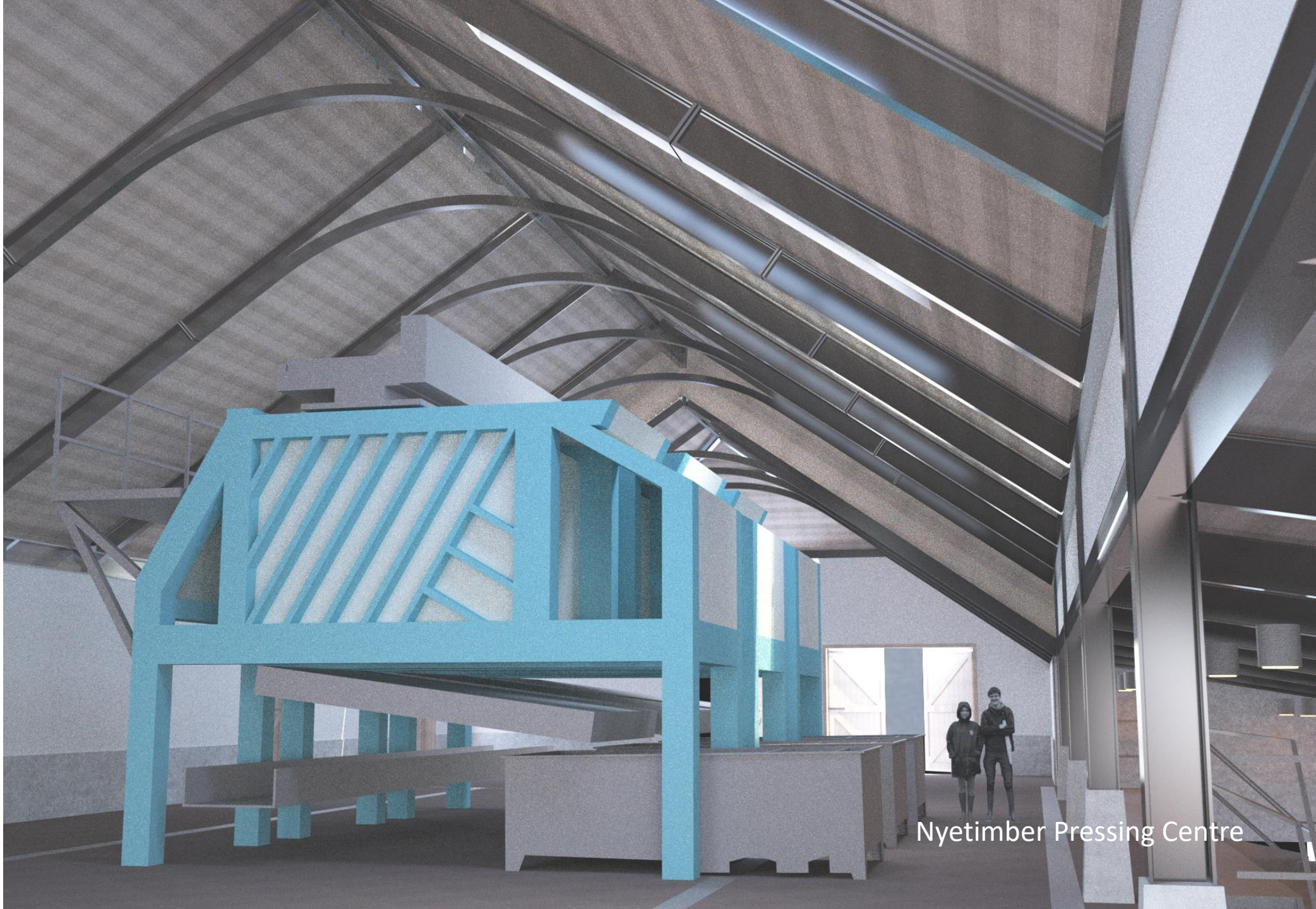
Salvation Army





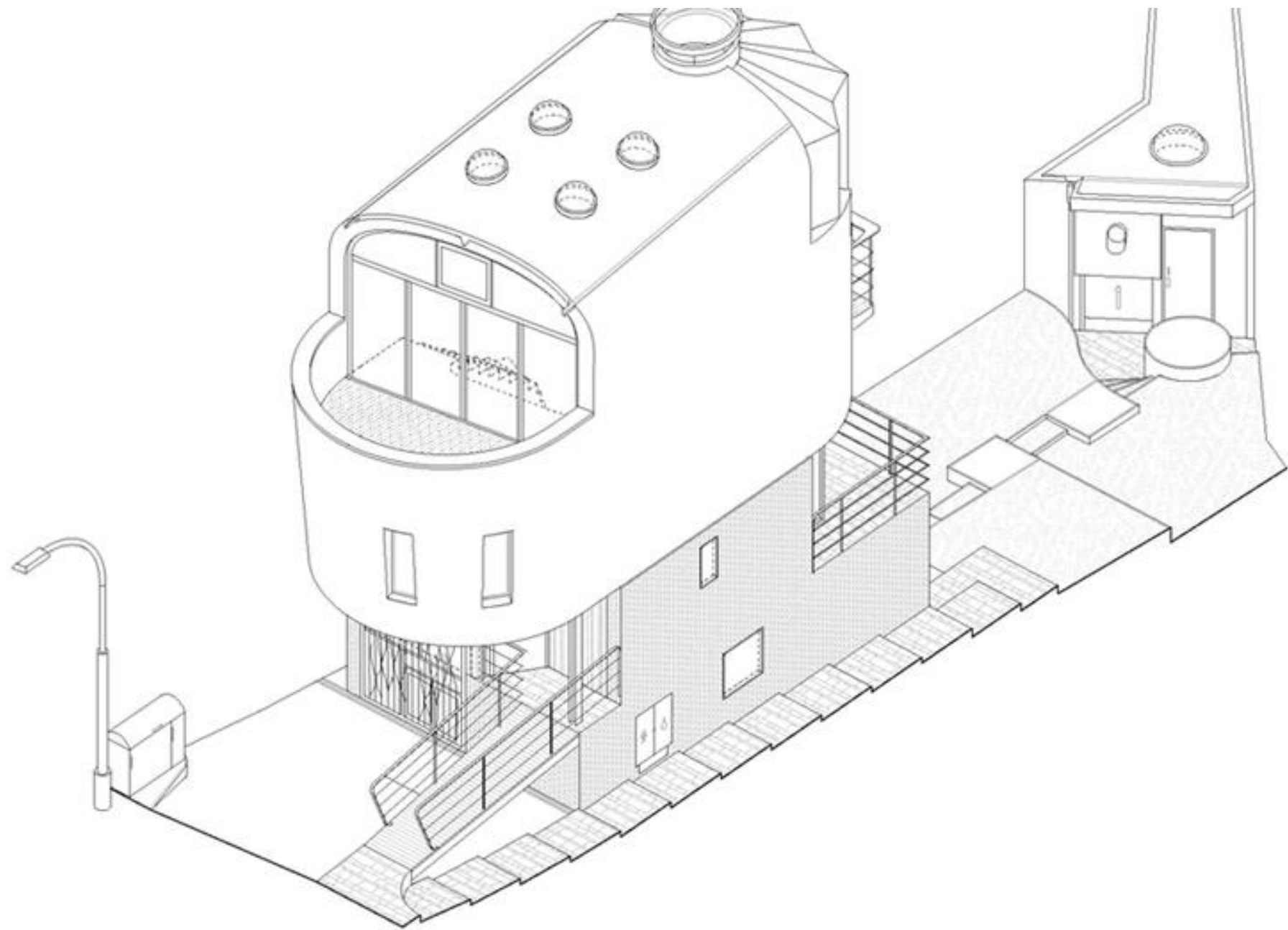
Hotel





Nyetimber Pressing Centre













SHORTLISTED  
RIBA HOUSE  
OF THE YEAR

WINNER  
RIBA LONDON  
AWARD

RA

Royal  
Academy

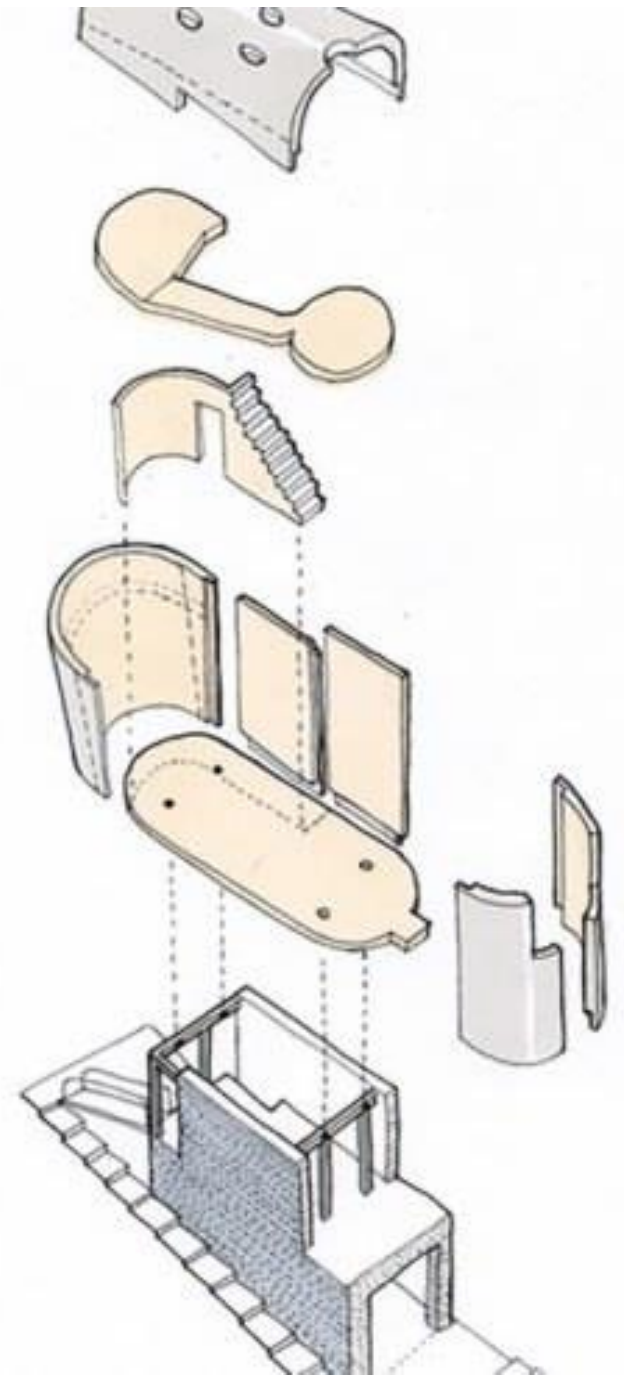
AJ

ARCHITECTURE  
AWARD

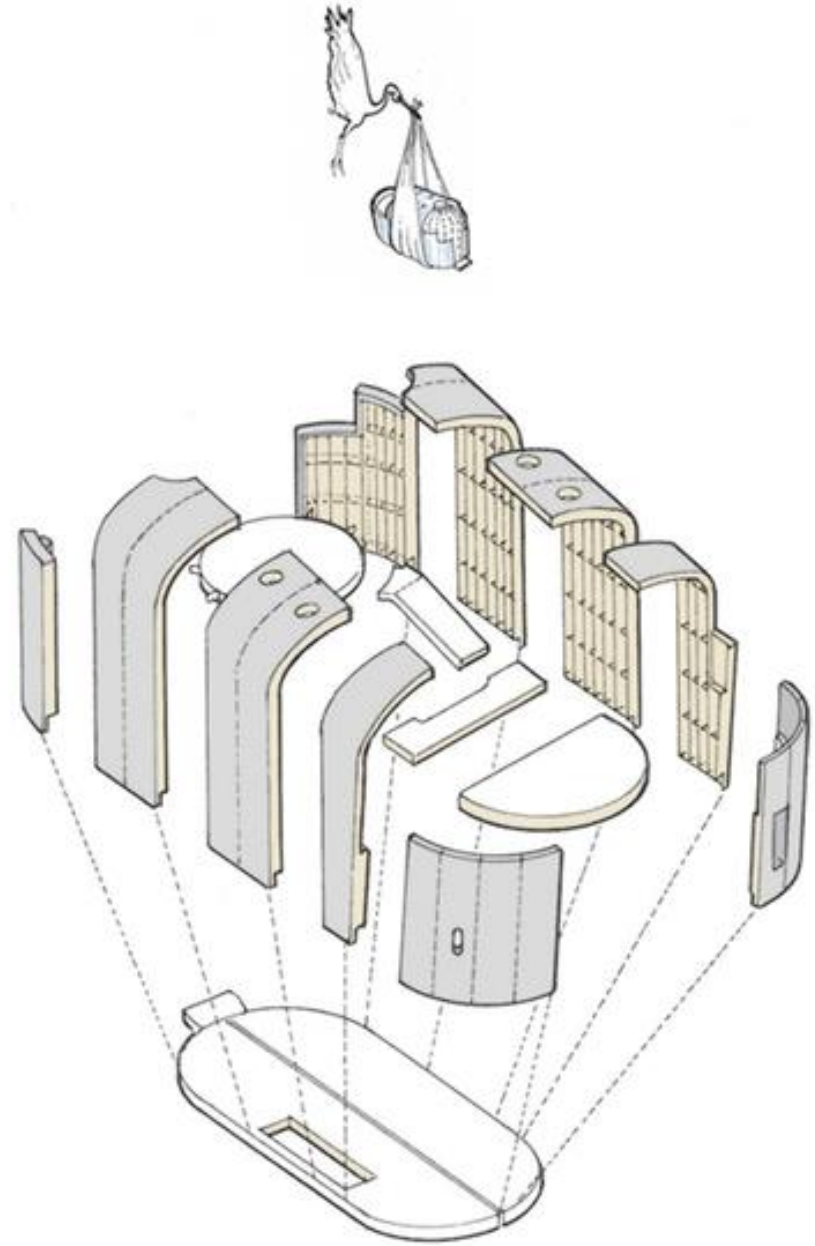




















Drop House





Drop House





Drop House





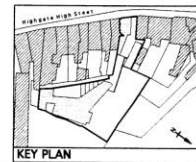
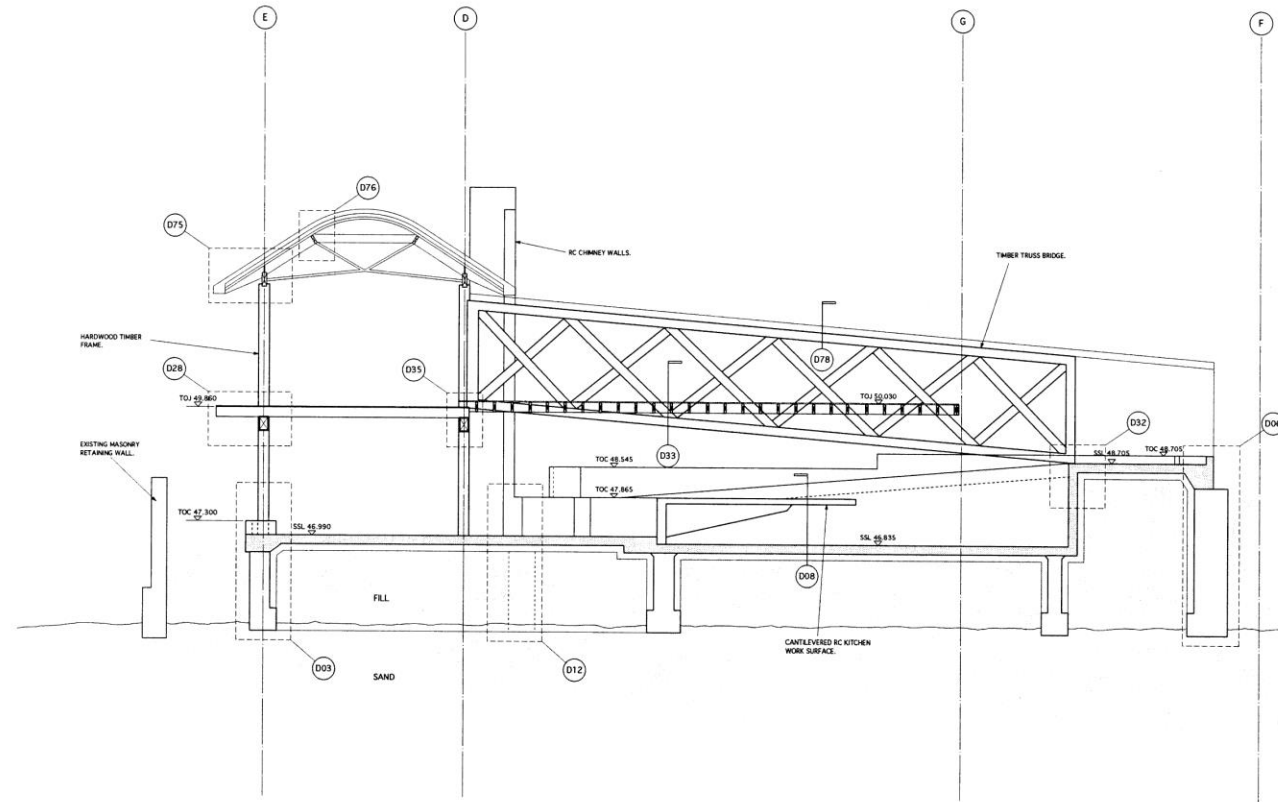
The Barnhouse





The Barnhouse





REV. 02/04/01 ISSUED FOR INFORMATION.	DATE 17/03/00 DRAWN DP CHECKER NOTES: 1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS. 2. DO NOT SCALE THIS DRAWING. 3. FOR GENERAL NOTES SEE DRAWINGS 99027/01 AND 02.	INFORMATION.	TECHNIKER  TECHNICAL LTD. CONSULTING STRUCTURAL ENGINEERS 210 WINE HILL 5, CHURCHILL DRIVE TEL: 001 900 400 000 FAX: 001 900 400 001	PROJECT: BARNHOUSE, HIGHGATE DRAWN: SECTION A-A SCALE: 1:50 DATE: MAR 00 DRAWN BY: RC CHECKED BY: SF PROJECT NO: 99027/05
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The Barnhouse





The Barnhouse

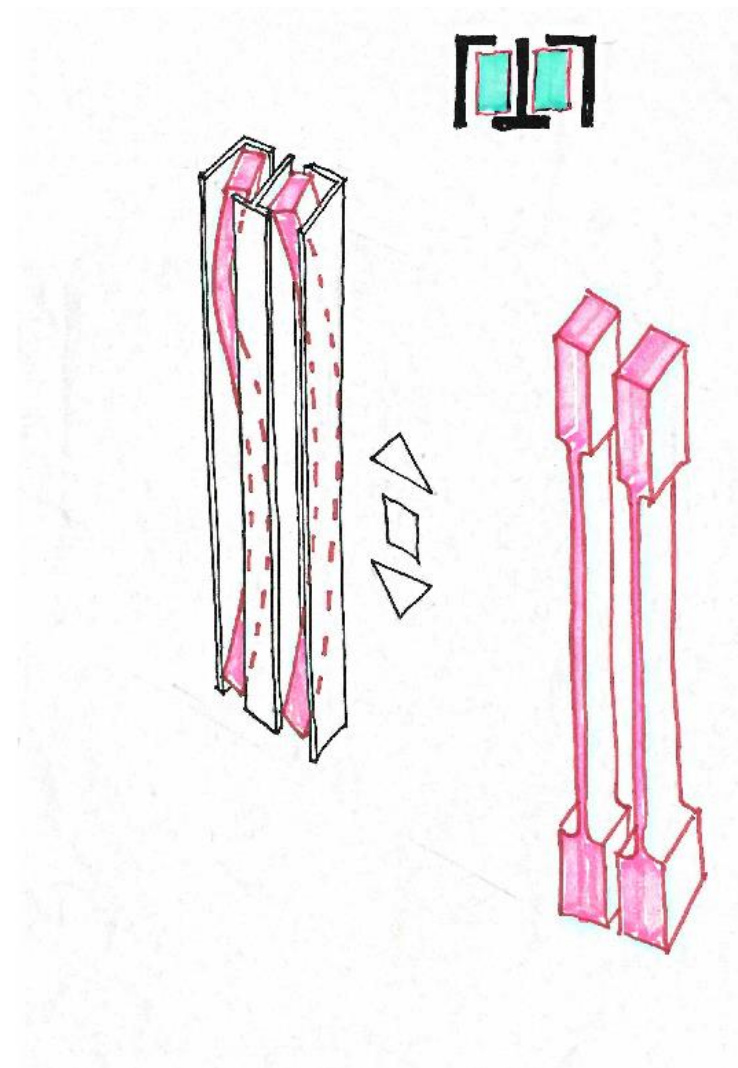
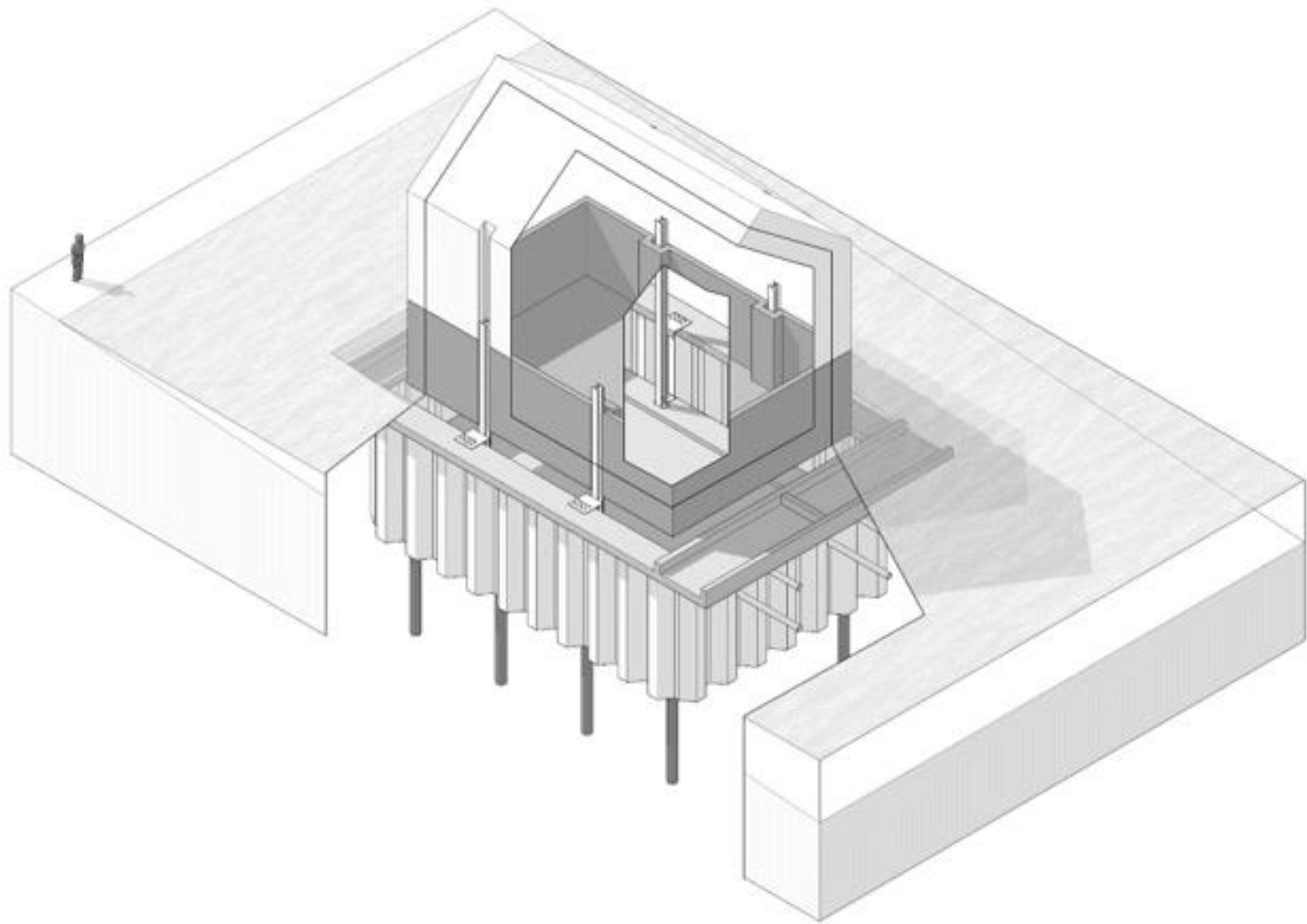










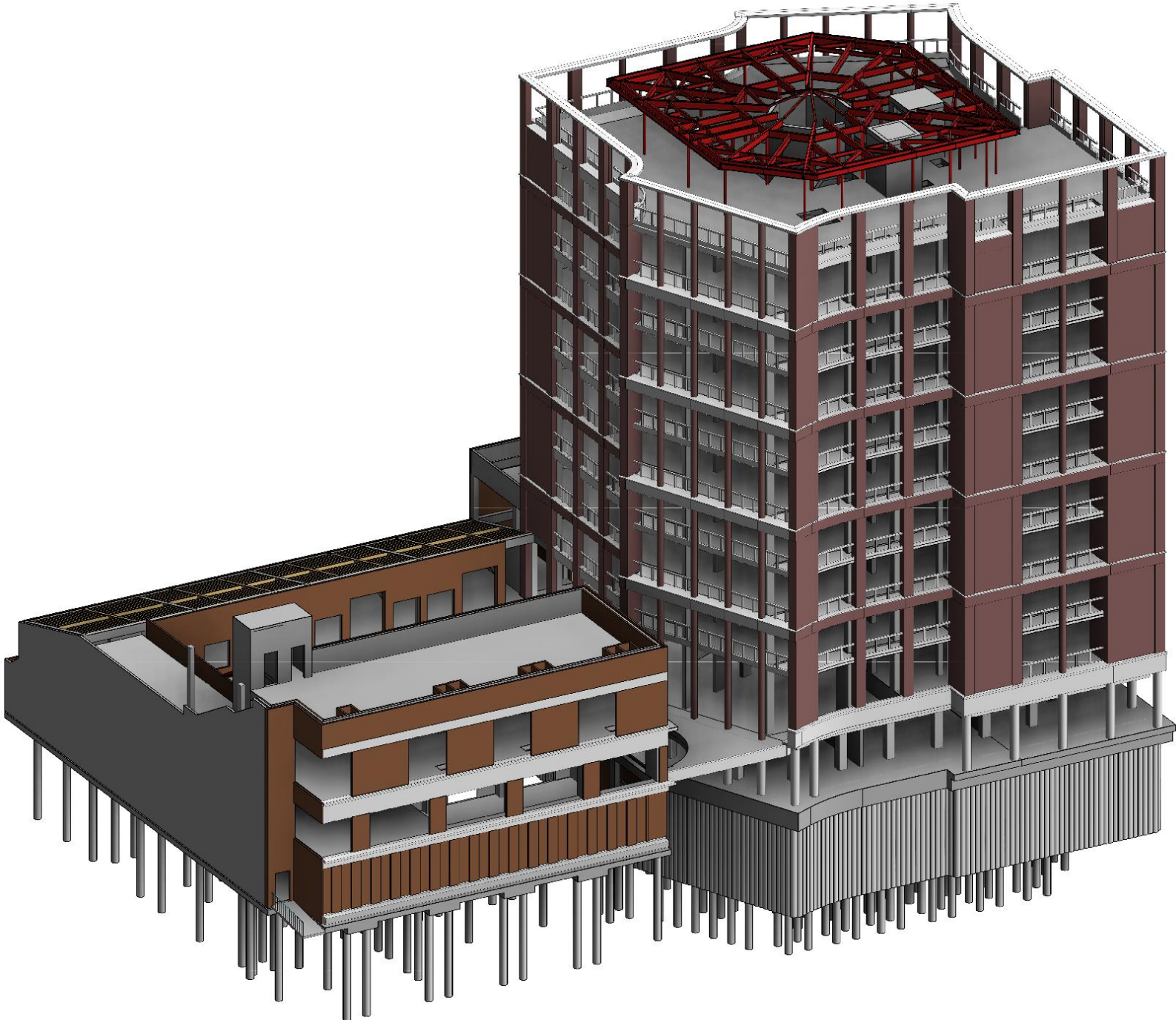




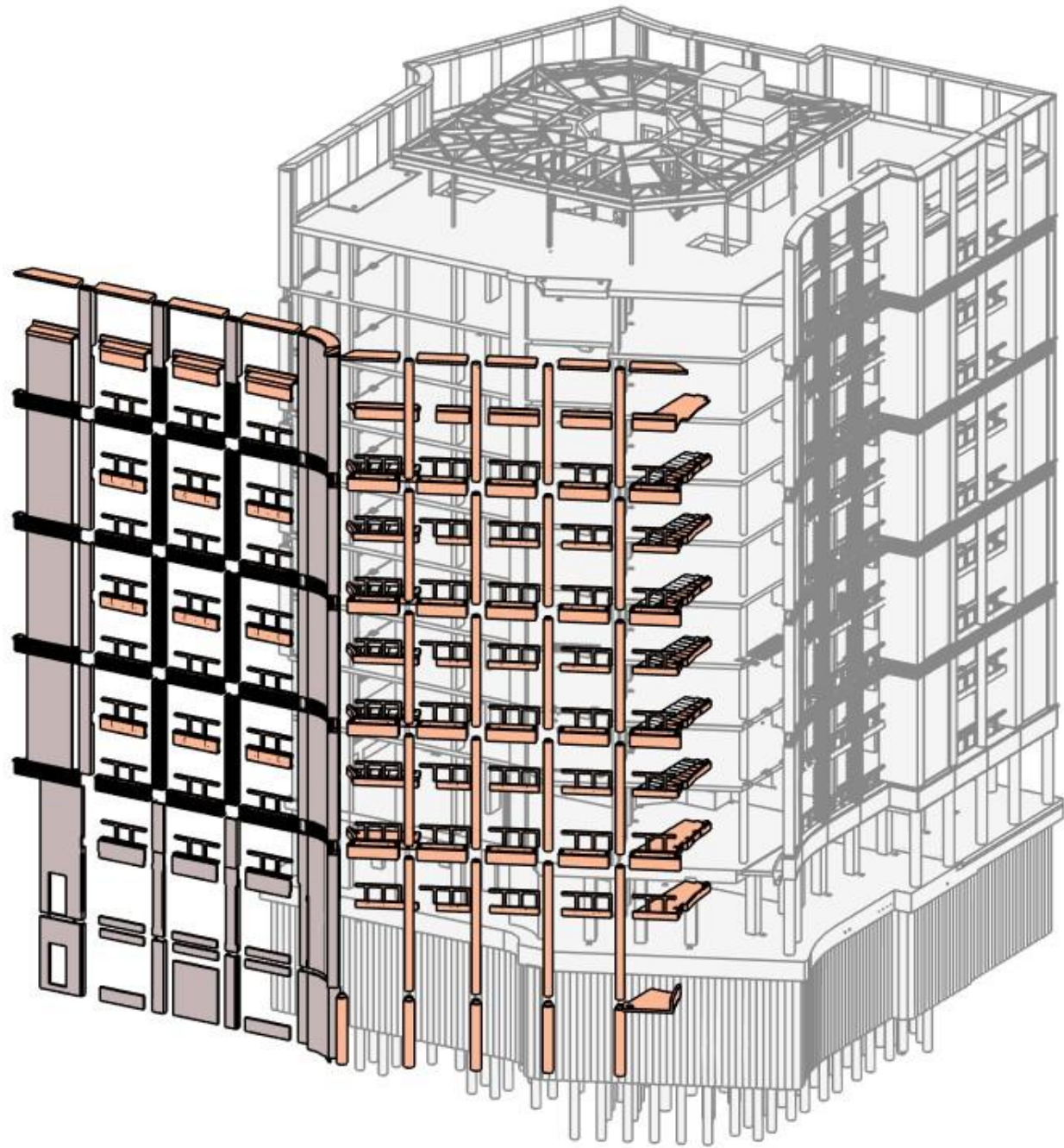


Stadthaus and Kingsland

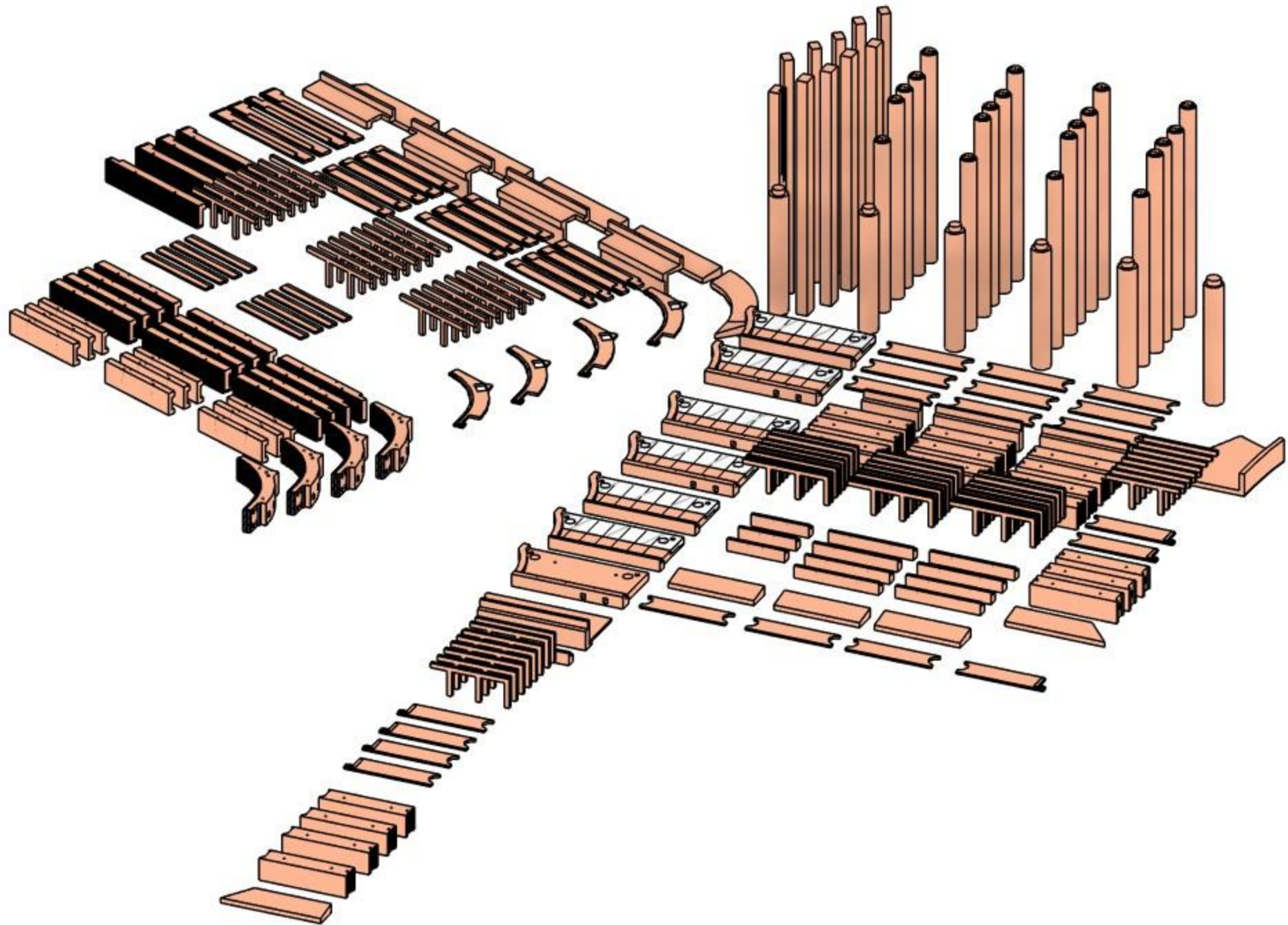








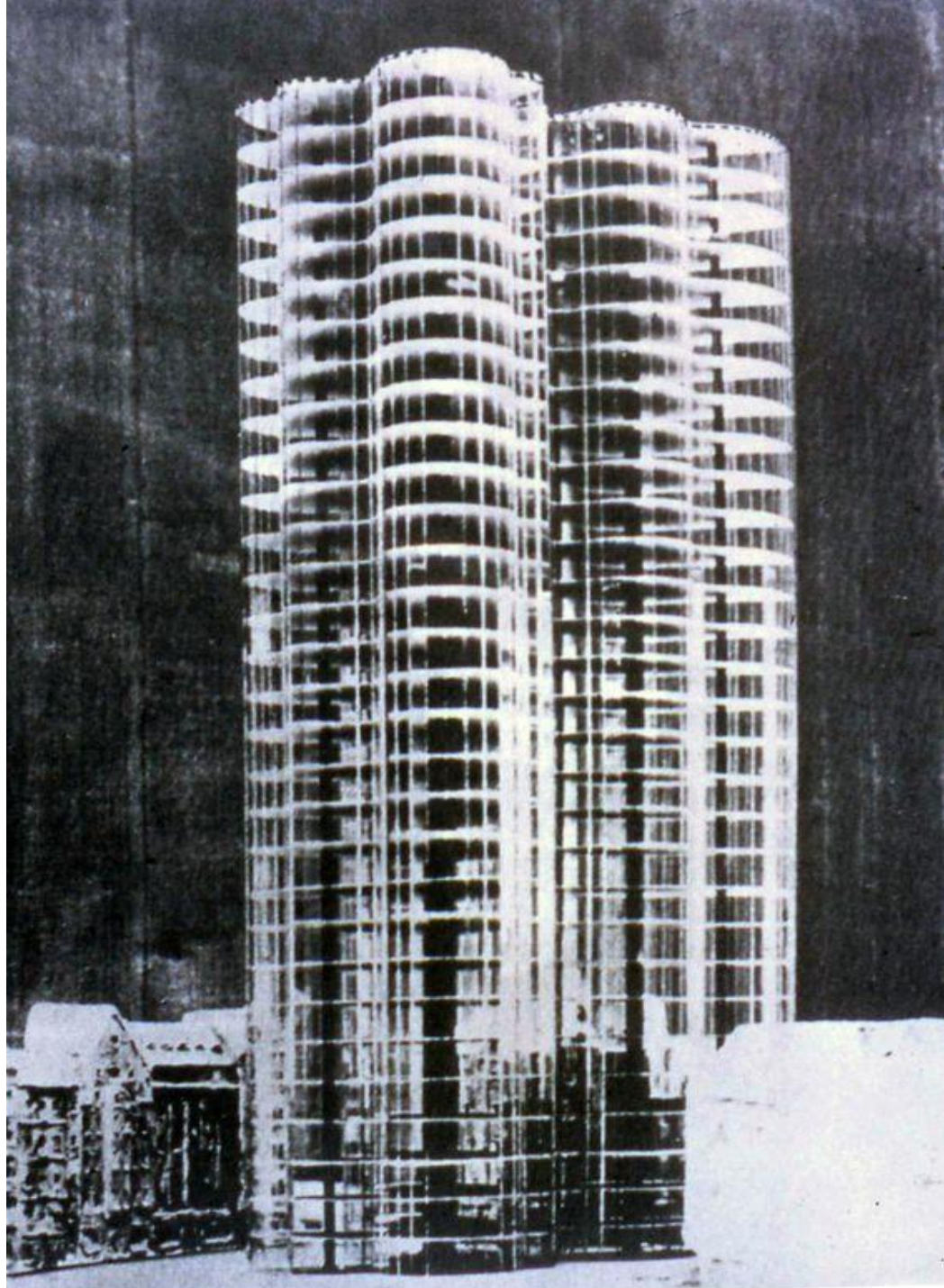








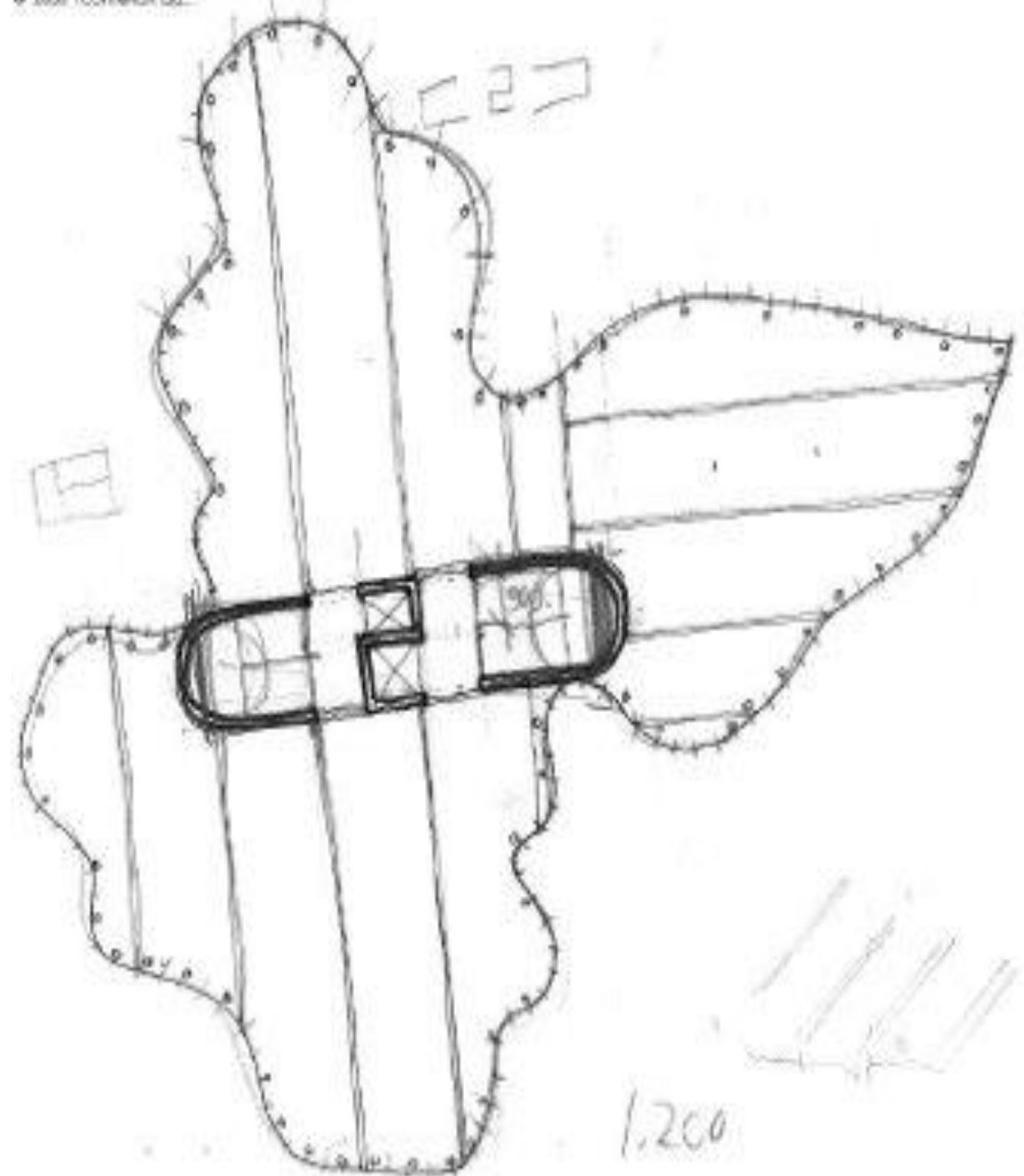












1.200

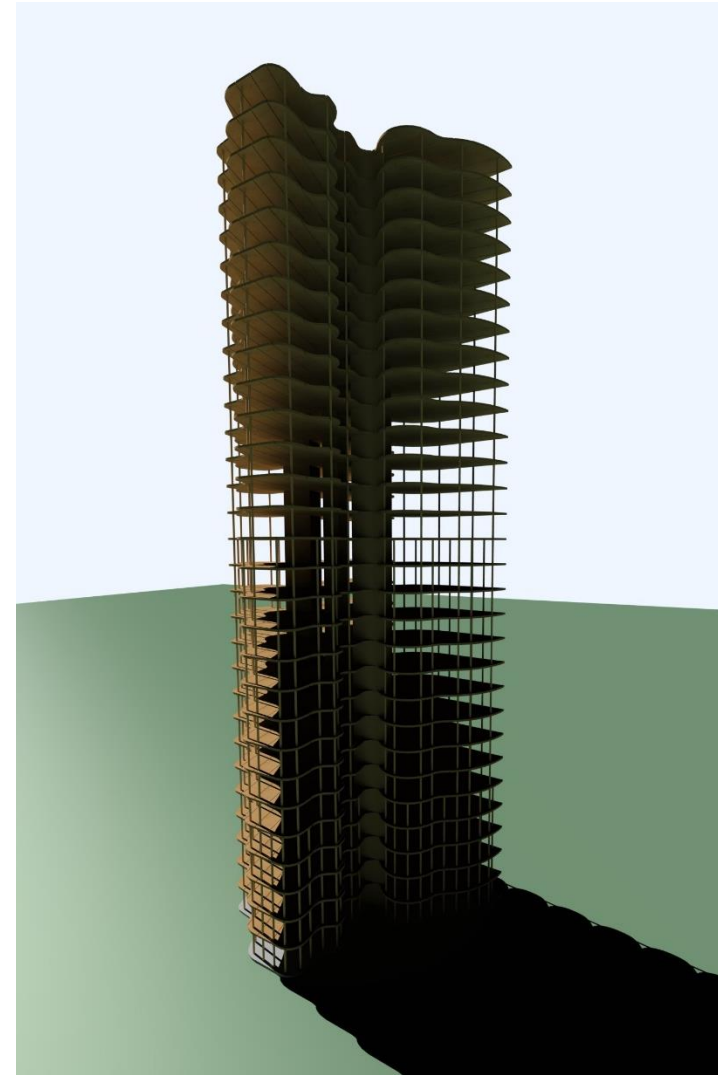


# Limits of construction

Elasticity of timber and its relative 'softness' are critical for future tall timber buildings.

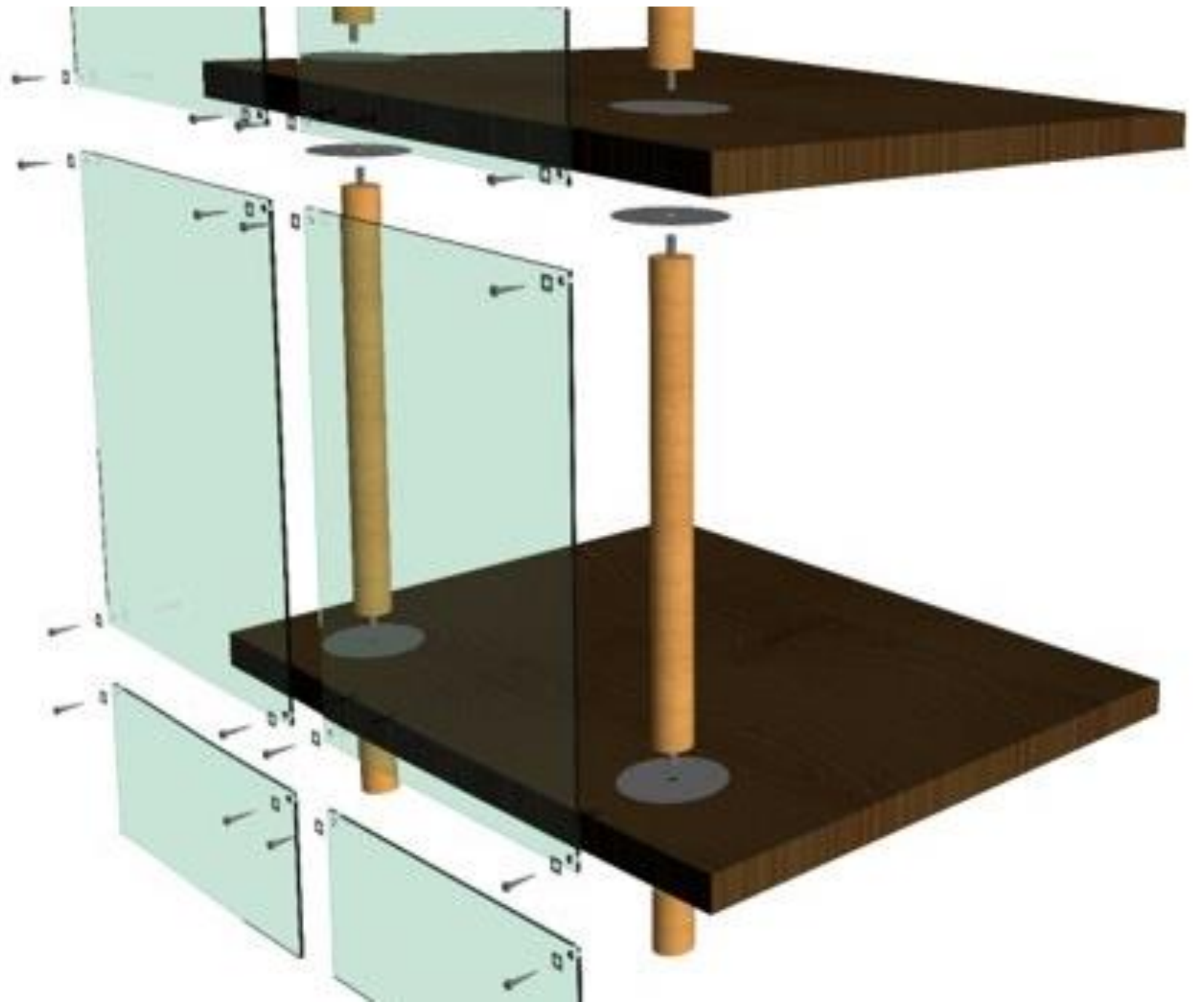
Economic viability hinges on quantity and simplicity of detailing.

Using simple wall/floor/wall construction 15 storeys possible.



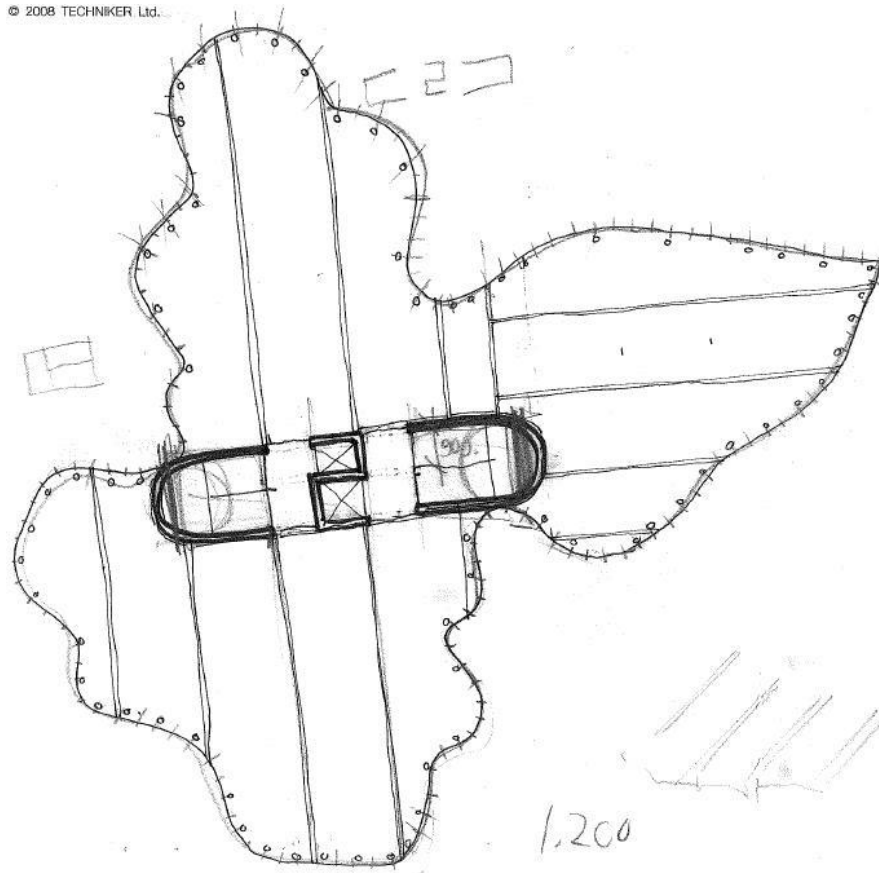
Taller Timber Buildings







# Thirty storeys?



Taller Timber Buildings





Rye Oak Children's Centre











A high-magnification, yellow-tinted microscopic image of wood grain. The image shows a complex, wavy pattern of dark and light bands, representing the cellular structure of wood. The text is overlaid in a bold, black, sans-serif font, centered horizontally and slightly offset vertically.

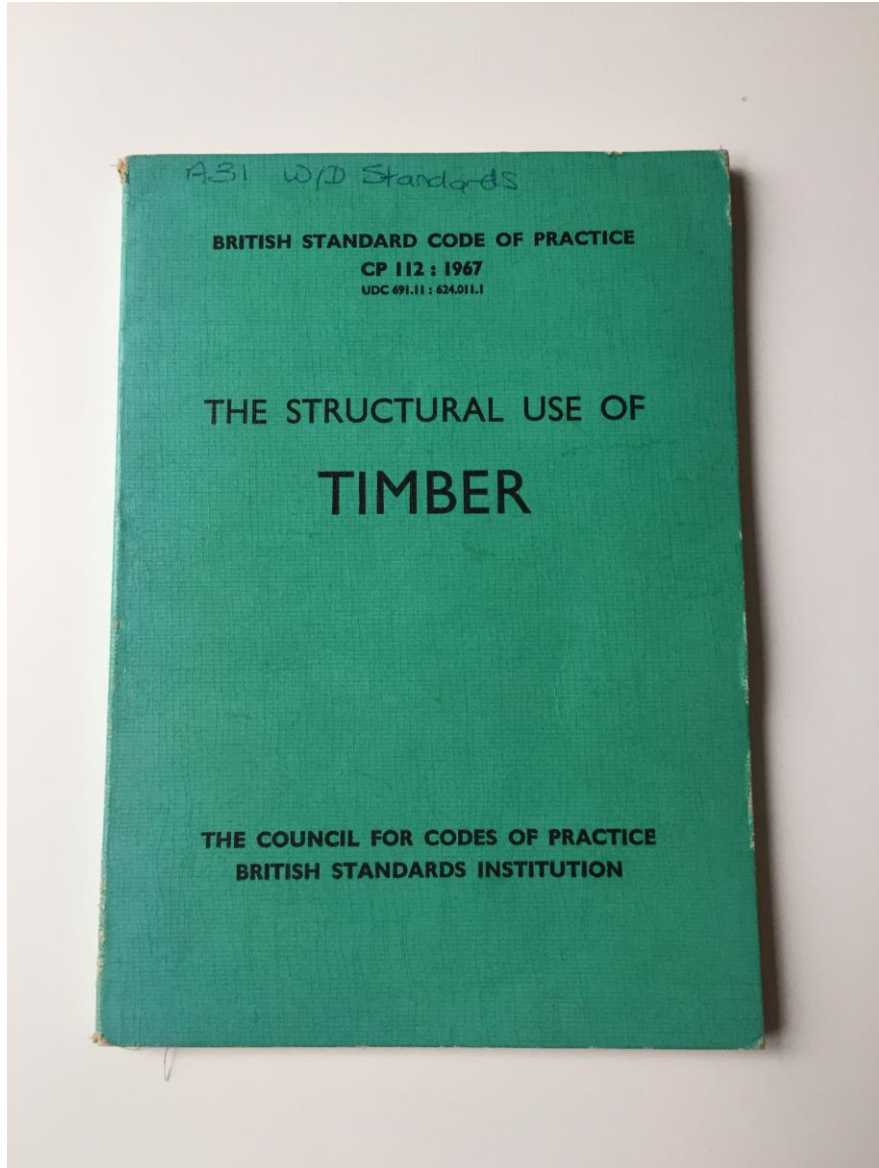
**A  
PROCESS  
REVEALED**

**AUF  
DEM  
HOLZWEG**













10

Blue 'A' symbol sign



2





Site plan



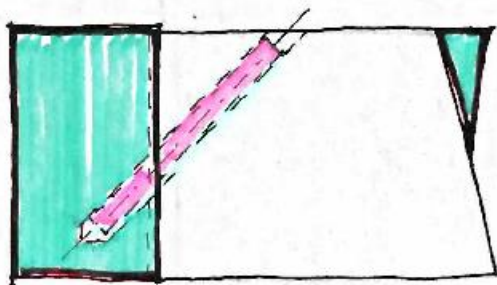
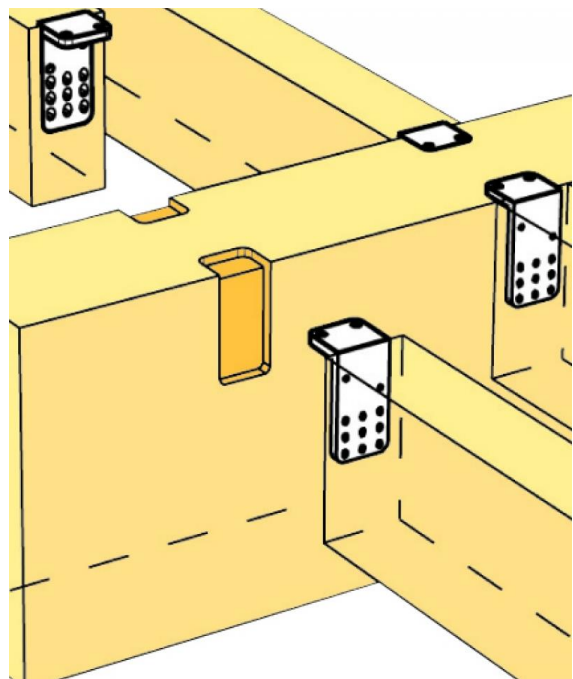
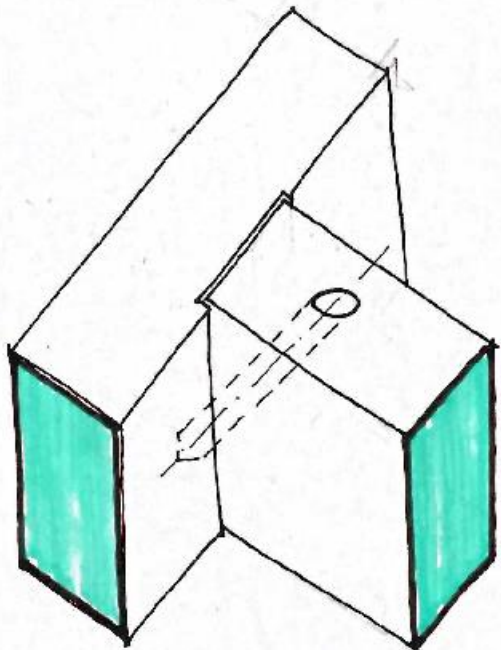
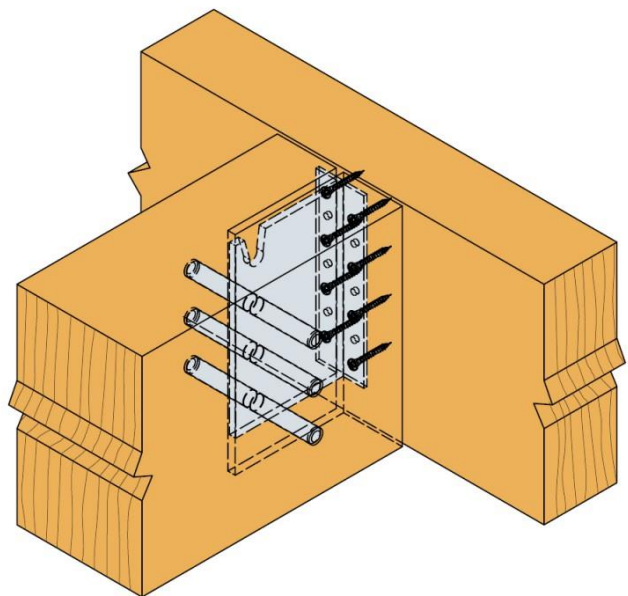














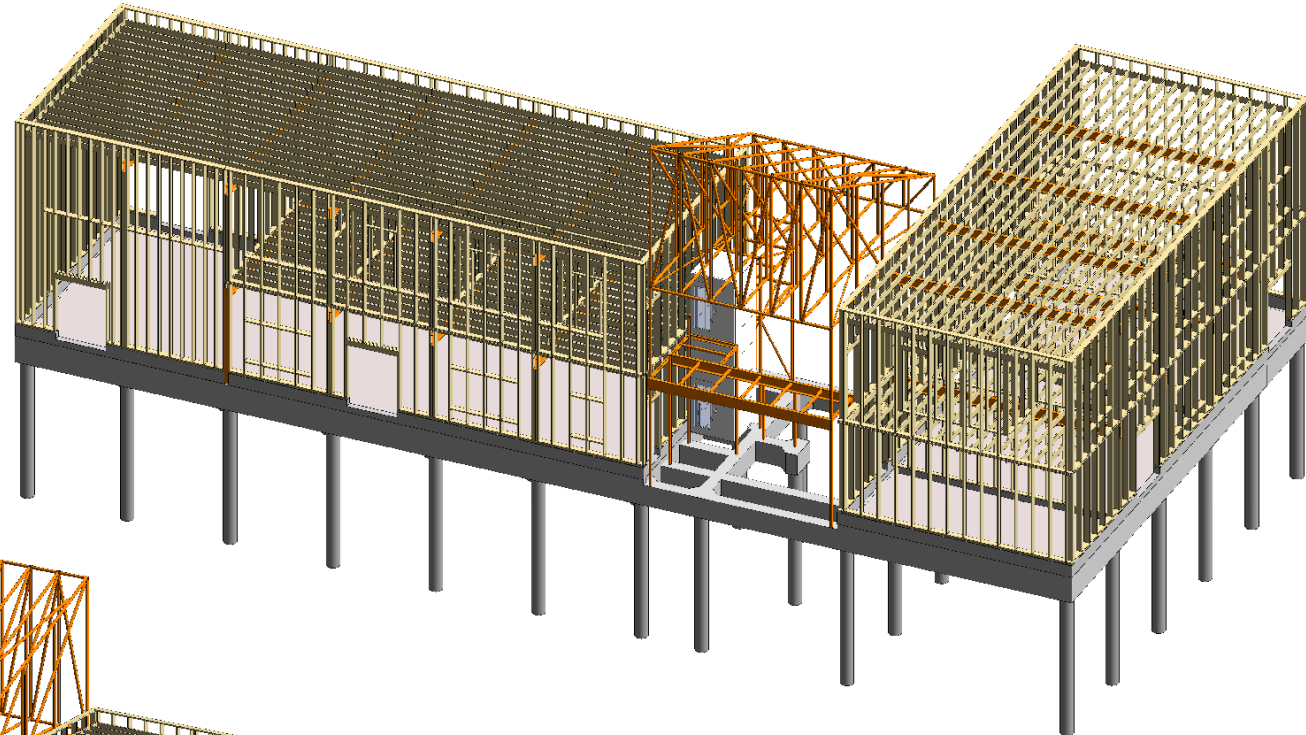




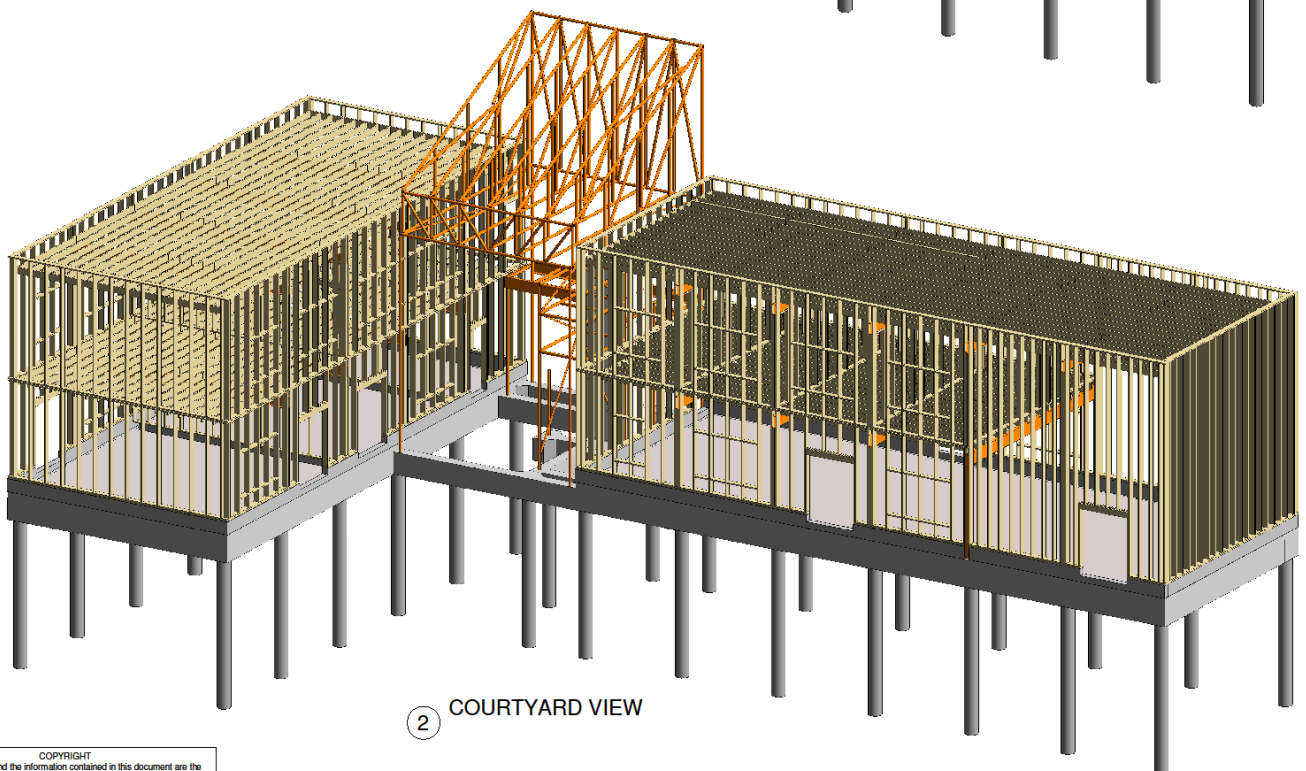




① ROAD VIEW



② COURTYARD VIEW

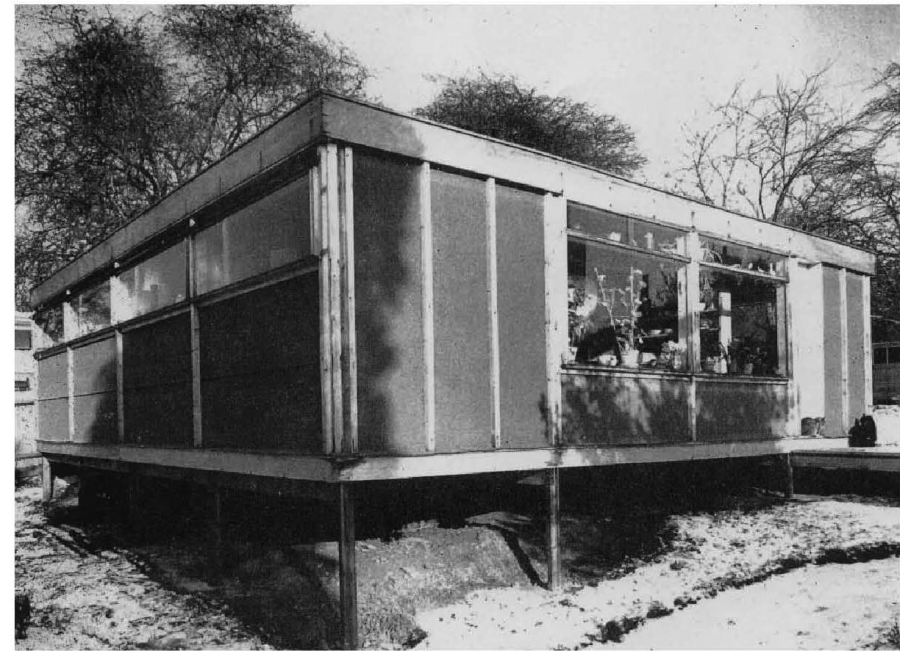
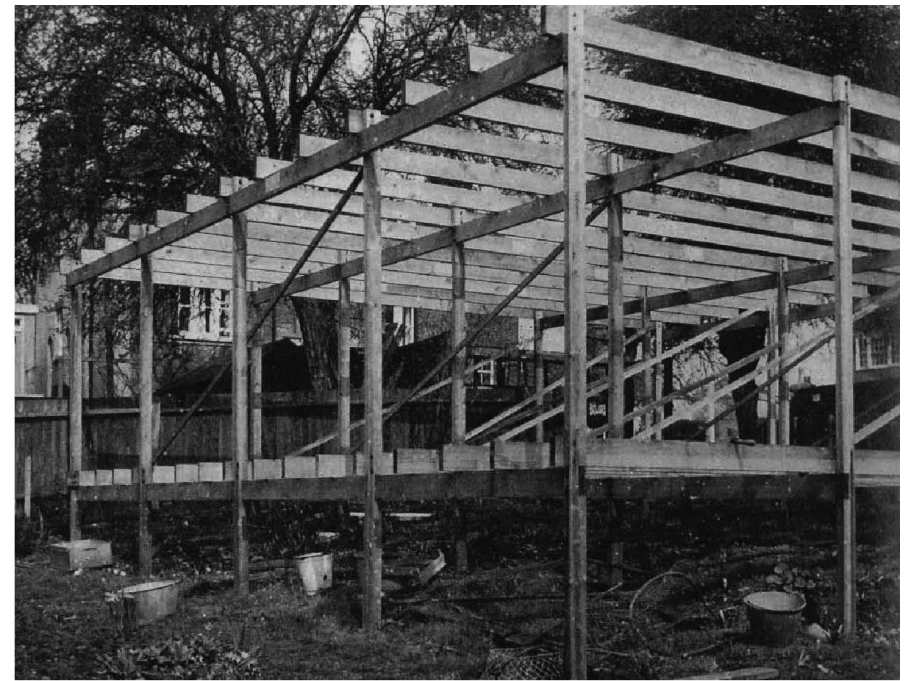
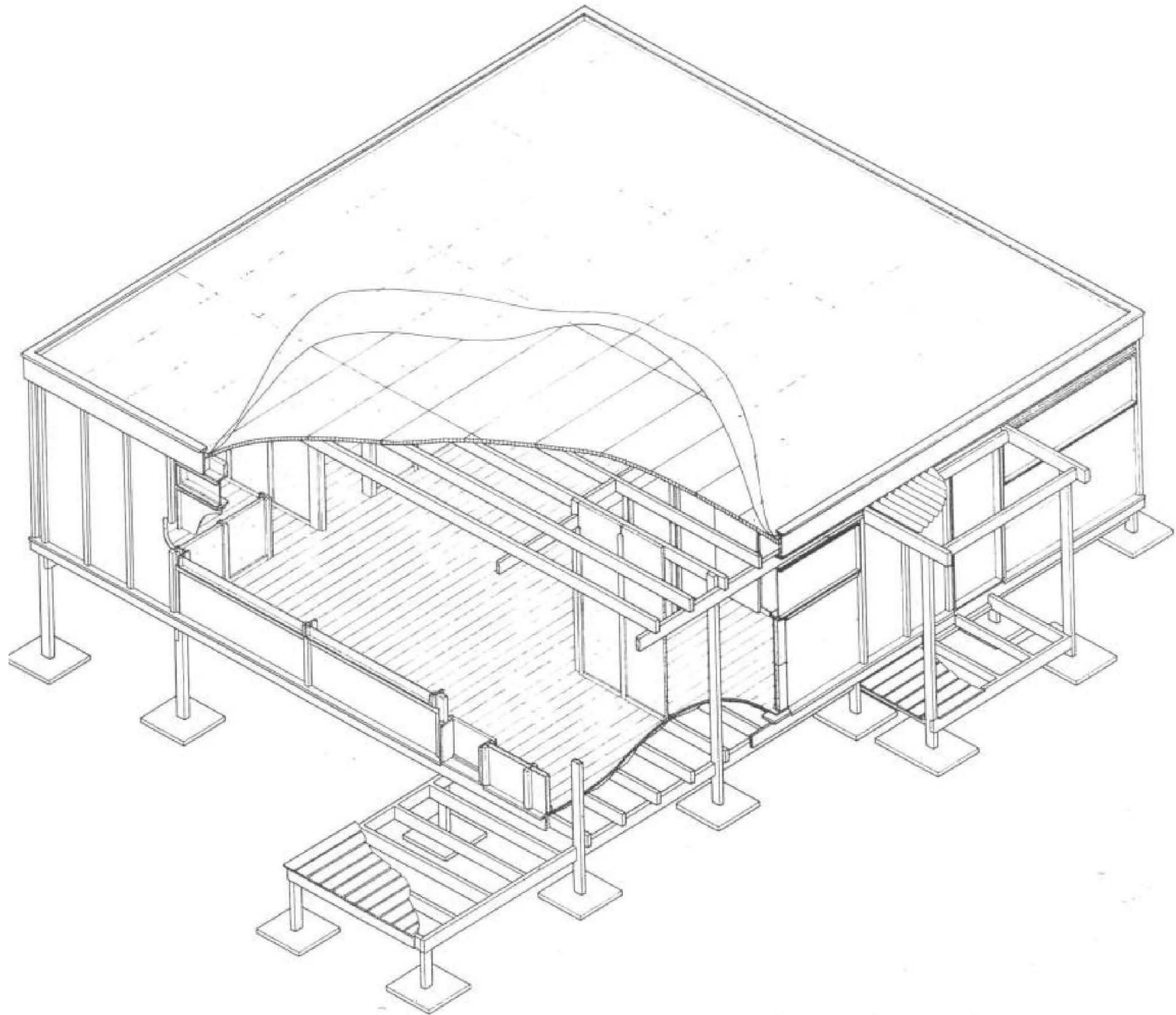


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CLIENT	Livesey Exchange Ltd		
PROJECT	Livesey Exchange Building		
DRAFTER	MJ	ENGINEER	MJ
CHECKED BY	DAC		
TITLE	3D STRUCTURAL ELEMENTS		

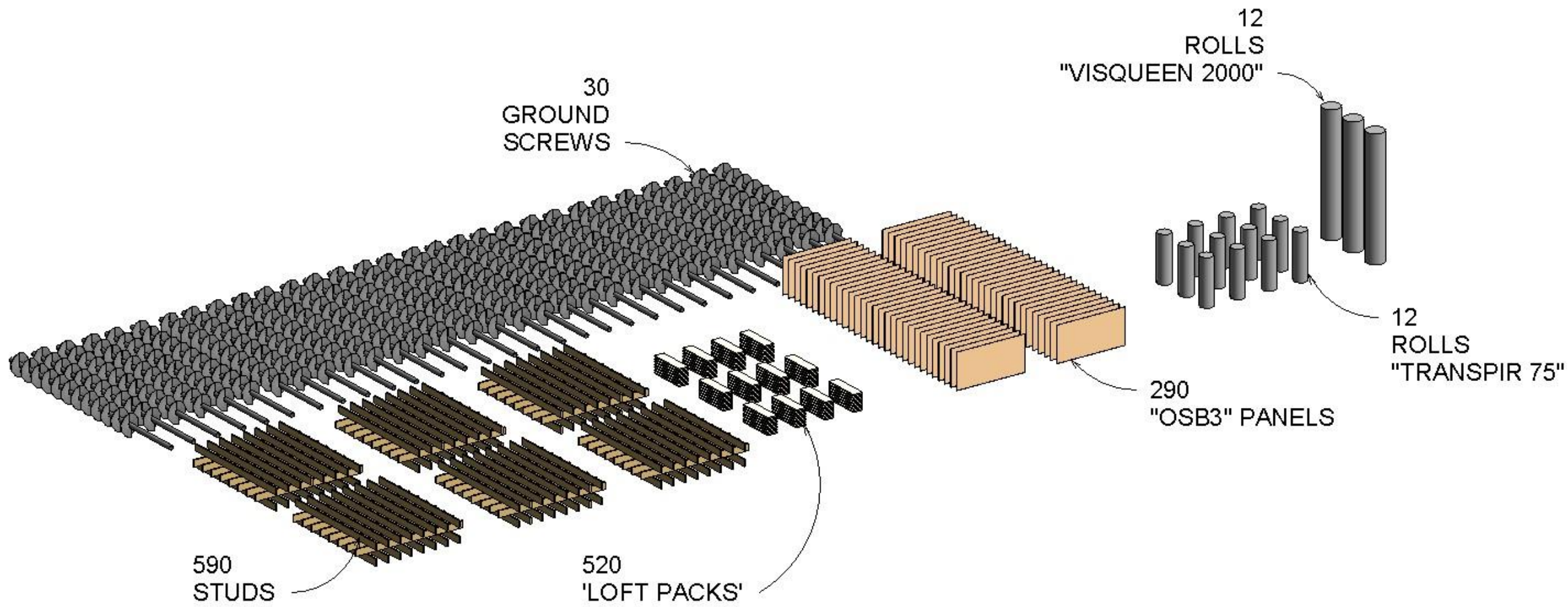
































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Jules et Jim/Hypotrachelion