A BRA ARENA

Photo by Dirk Lindner Photography & Film

CASE STUDY - AUGUST 2022

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The ABBA Arena is currently located at London's Queen Elizabeth Park. ES Global appointed Stufish Entertainment Architects to carry out the design on this project.

The majority of the structure consists of mass timber and a steel frame.

The arena has been designed so it can be dismantled and relocated to another location at a later date. It can welcome up to 3000 people.

> -138,793 Kg CO₂ the amount of CO₂ saved using our wood products

Find out more: www.jamesjones.co.uk/productsand-services/engineered-timber/ jji-joists/carbon-data

The dome shaped roof structure is made up of 270 triangular cassettes, spanning between 0.5m and 12.00m. These were manufactured using JJI-Joists, OSB, mineral wool insulation and acoustic separation foam.

Client	ES Global
Architect	Stufish Entertainment Architects
Structural Engineer	Atelier One
Engineered Cassette Supplier	Timber Innovations
JJI-Joist Supplier	Crendon
JJI-Joists/Glulam	400D = 7,160 lm Glulam 45 x 400 = 8,880 lm
Project Value	Circa £1.5m



Structure showcasing the extensive use of Glulam and CLT



ABBA-Bjorn Ulvaeus, Agnetha Faltskog, Anni-Frid Reuss, Benny Andersson





The prefabricated roof cassettes form the acoustic timber dome over the steel frame theatre building. The Dome has a diameter of 70m, and the building reaches an impressive height of 25.5m. The cassettes are designed to keep the sound inside the building. With a three layer floating outer skin they improve the acoustics of the arena.





Engineered JJI-Joists for the roof cassettes were cut to size by Crendon in East Harling, then manufactured into cassettes by Timber Innovations and Wyckham Blackwell in their Solihull depots. <u>www.timberframe.co.uk</u>

The ABBA Voyage tour began on 27th May 2022.

