

The National Motor Museum

At Beaulieu, Hants, for the Trustees of the National Motor Museum and Montagu Ventures (Lord Montagu of Beaulieu)

Architects

LEONARD MANASSEH & PARTNERS

Structural Engineers

FELIX J. SAMUELY & PARTNERS

Steelwork Contractor

DIBBEN STRUCTURAL ENGINEERS

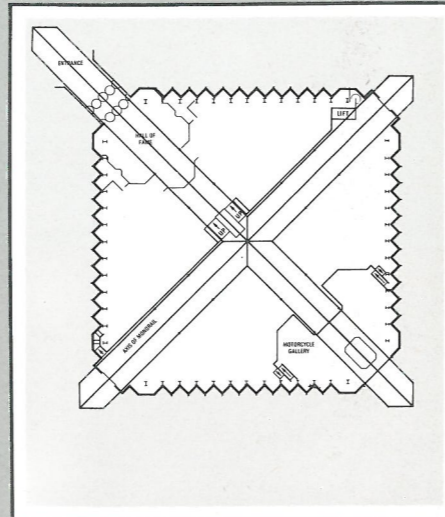
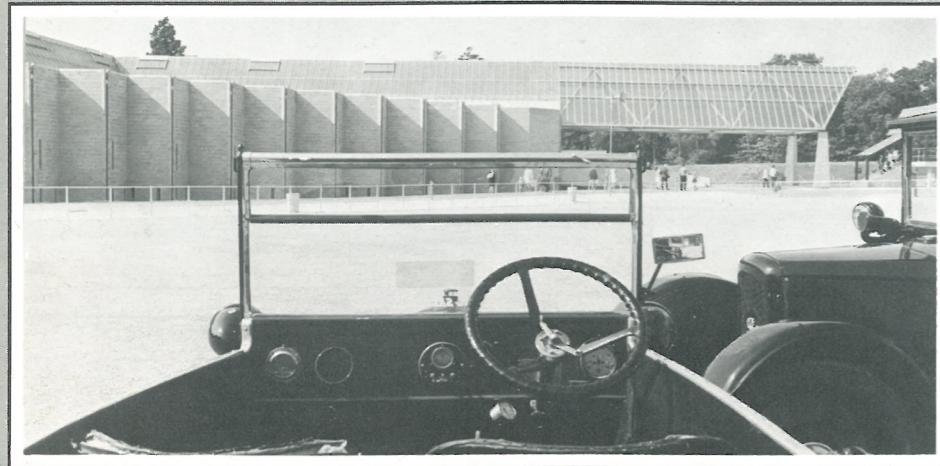
Judges Comments

A group of buildings comprising the museum, an information building and a restaurant, of which the museum itself receives the steel award.

The square plan, enclosing the maximum circulation space, is lit by two diagonal transepts, one of which allows the passage through the building of a monorail.

The building is structurally explicit and the steel members have an affinity with the exhibits which are displayed in a clear uncluttered space.

The strong cruciform shape of the steel transepts, set on rugged concrete block enclosing walls, is an angular and satisfying form against the soft background of gently sloping ground and rolling woods.



The Museum is about 200ft square with a steel lattice roof construction and metal roof cladding. A large cruciform glazed light covering the diagonals of the building extends beyond each corner to form entrance canopies, the largest being over the main public entrance on the north-east corner. Three other canopies provide shelter for vehicles to leave and enter the Museum as a large number of the exhibits are kept in running order. Two of the canopies also provide all-weather access for the mini-rail which runs diagonally through the building via the north-west and south-east corner openings.

The spine girders are triangular in cross-section and are 17ft and 24ft wide. They are made from two inclined tubular lattice girders with 8 3/4 in diagonals and 7 3/8 in and 5 1/2 in chords. The girders are supported by tubular columns at 31ft and 46ft centres. A number of open web girders span from the spines to the perimeter wall at 11ft 3in centres. Although their spans differ the constructional details have been kept constant in the interest of economical production. The roof perimeter is supported on a number of I-section columns and the steelwork is structurally independent of the concrete block walls. No fire protection was required for the steelwork as in order to lower the potential fire risk all vehicles have their fuel tanks emptied before being placed in the Museum.

