
PREFACE

Structures that move in the course of normal use, or which have to be assembled or erected rapidly on a relatively unprepared site, offer a particular challenge to the designer. The interaction between the structure and the mechanism by which it moves is essential in these cases. The speed of assembly, and what this means in terms of logistics, materials and cost, is a major factor in many such structures.

Mobile and rapidly assembled structures play a major role in disaster mitigation and temporary accommodation. They are of primary importance in many military as well as civilian applications and are widely used for rescue and maintenance services. Their importance continues to grow in contemporary society where speed of response is of primary importance.

There are problems such as the efficient design of assembly joints, the resistance to damage of the membrane and metal cladding, crashworthiness and the limits of serviceability. Some areas of the subject are already well documented, but knowledge is fragmented and there is little design guidance available in the form of textbooks, data sheets or codes of practice. The interaction between morphology, kinematic behaviour and structural performance – typical of these structures – poses real challenges in terms of design and successful realisation.

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*The Editors
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