

Prefabricated **STRUCTURES**

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A Division of Visual Soft India Pvt. Ltd.

ISBN-13: 978-93-86258-71-7
FIRST EDITION, SEPTEMBER 2017, INDIA

Printed & Published by:
VSRD Academic Publishing
(A Division of Visual Soft India Pvt. Ltd.)

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Printed & Bound in India

VSRD ACADEMIC PUBLISHING
A Division of Visual Soft India Pvt. Ltd.

REGISTERED OFFICE

154, Tezabmill Campus, Anwarganj, KANPUR – 208003 (UP) (IN)
Mb: 99561 27040, Web: www.vsrdpublishing.com, Email: vsrdpublishing@gmail.com

MARKETING OFFICE (NORTH INDIA)

Basement-2, Villa-10, Block-V, Charmwood Village, FARIDABAD – 121009 (HY)(IN)
Mb: 98999 36803, Web: www.vsrdpublishing.com, Email: vsrdpublishing@gmail.com

MARKETING OFFICE (SOUTH INDIA)

340, FF, Adarsh Nagar, Oshiwara, Andheri(W), MUMBAI – 400053 (MH)(IN)
Mb: 99561 27040, Web: www.vsrdpublishing.com, Email: vsrdpublishing@gmail.com


P R E F A C E

Prefabrication is one of the key means of increasing buildability. As the industry strategizes itself to build with less labour and shorter construction time, prefabrication of concrete structures has become a viable alternative to the traditional way of construction. Prefabrication saves engineering time on the construction site in civil engineering projects. By using precast concrete components predominantly, on-site operations are considerably reduced, providing a safer working environment.

The main objective of this book is to present the concepts of prefabrication in a simplified way. This text book contains 12 chapters namely Introduction, Systems of Prestressing, Standardization and Modular Coordination of Components, Transportation, Erection Suspension and Hoisting of Prefabricates, Behaviour of Structural Components, Wall Panels and Shear Walls, Roof and Floor Slabs, Concreting of Precast Elements, Design Principles, Joints in Structural Members, Progressive Collapse and Abnormal Loads. The chapters are presented in a simple style with lots of information which benefits the faculty and student community. This book meets the syllabus requirements for Prefabricated Structures of Anna University, other affiliated Universities and Autonomous Institutions.

Very few text books are available as reference books for this topic. The authors are confident that this one book covering the entire syllabus will help the education community to a

greater extent in understanding the concepts and need for prefabrication. The authors would appreciate if suggestions regarding any errors, omissions and improvement of the text book are brought to their knowledge. It is for sure that the next issue would be free from errors and incorporating suggestions from the readers.

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