

Total Quality Project Management for the Design Firm

Frank A. Stasiowski and David Burstein

A sensible, disciplined program of total quality project management (TQPM) can transform the machinery of any design project into an efficient, cost-effective, and highly motivated professional team. The authors demonstrate how several leading design firms made the successful transition to TQPM, outlining how this effective tool can be practically applied to an entire range of design project problems — from sales and administration to budgeting and more. This book comes with numerous forms useful for self-analysis, evaluation, and action as well as a glossary of terms, checklists, and references to more specialized reading.

John Wiley & Sons, Inc., 605 3rd Avenue, New York, NY 10158, 1994, 405 pp., \$49.95.

Performance of Hybrid Moment-Resisting Precast Beam-Column Concrete Connections Subjected to Cyclic Loading

William C. Stone, Geraldine S. Cheok, and John F. Stanton

Test results of 10 hybrid precast concrete beam-to-column connections are presented. These tests constitute Phase IV of an experimental program on $1/3$ -scale model precast moment-resisting connections conducted at the National Institute of Standards and Technology (NIST). The objective of the test program is to develop guidelines for the design of moment-resisting precast connections in regions of high seismicity. The hybrid connections consist of mild steel used to dissipate energy and post-tensioning steel used to provide the required shear resistance. Variables examined were the amount and type of mild steel (ASTM A 615). The amount of post-tensioning steel was varied to control the relative moment capacity contributed by the

post-tensioning and mild steel. The specimens were subjected to reversed cyclic loading in accordance with a prescribed displacement history. Connection performances were compared to previous NIST tests based on energy dissipation capacity, connection strength, and drift capacity. Hybrid precast connections can be designed to match or exceed the performance of a monolithic connection in terms of energy dissipation, strength, and drift capacity.

ACI Structural Journal, V. 92, No. 2, March-April 1995, pp. 229-249.

Reinforced Concrete After Cracking

Alberto Fuentes

This second edition covers the flexural and shear behavior of indeterminate concrete structures including deep beams and short brackets. The author shows that, through a proper understanding of cracking in reinforced concrete members, the deformations in multistory buildings can be estimated to account for horizontal forces and especially the effect of vertical loads.

A. A. Balkema, Witgevers B.V., Postbus 1675, NL-3000 BR, Rotterdam, The Netherlands, 1995, 140 pp., \$55.00.

Hybrid Concrete Construction

C. H. Goodchild (Editor)

This book illustrates how precast concrete, cast-in-place concrete, steelwork, and other materials can be combined in building structures, harnessing the benefits of each material to produce hybrid concrete solutions for particular sets of circumstances. Examples show how hybrid concrete construction can provide economy, speed, flexibility and buildability, resulting in high quality and aesthetically pleasing structures.

British Cement Association, Century House, Telford Avenue, Crowthorne, Berkshire RG116YS, England, 1995, 64 pp.

Application of High Performance Concrete

This 65-page report by the Comité Euro-International du Béton (CEB) is an update of CEB's state-of-the-art report on high performance concrete. The report is organized into four sections: (1) detailed documentation of projects worldwide in the final phase of construction that use high performance concrete; (2) an abbreviated listing of 100 further projects worldwide using high performance concrete; (3) rules and regulations based on international codes regarding use of high performance concrete; and (4) a listing of 100 current research projects on the subject of high performance concrete.

Comité Euro-International du Béton, Case Postale 88, CH-1015, Lausanne, Switzerland, 1995, 66 pp.

Lessons from Kobe

Kalle Matso

Presents an overview of the structural damage to buildings, bridges, and other structures caused by the January 17, 1995, Kobe, Japan, earthquake.

Civil Engineering, V. 65, No. 4, April 1995, pp. 42-47.

Second CANMET/ACI International Symposium on Advances in Concrete Technology

Thirty-two papers from 20 countries are included in these proceedings from the 1995 concrete technology symposium. Among the subjects examined are: lightweight concrete, flexural cracking, effect of permeability formwork on the durability and transport properties of near surface concrete, reducing shrinkage, floor construction performance assessment, and prevention of alkali-aggregate reaction, among others.

American Concrete Institute, P.O. Box 19150, 22400 W. Seven Mile Rd., Detroit, Michigan 48219, 1995, 643 pp., \$44.95.