

November 2004 Volume 130, Number 11 ISSN 0733-9445 CODEN: JSENDH



Journal of Structural Engineering

1637 Editor's Note Sashi K. Kunnath

Forum

Anton Tedesko and the Introduction of Thin Shell Concrete Roofs in the United States

Eric M. Hines and David P. Billington

Technical Papers

- 1651 Measures of Structural Redundancy in Reinforced Concrete Buildings. I: Redundancy Indices Mohamed Husain and Panos Tsopelas
- Measures of Structural Redundancy in Reinforced Concrete Buildings. II:
 Redundancy Response Modification Factor R_R Panos Tsopelas and Mohamed Husain
- 1667 Effects of Site Classes on Damping Reduction Factors Yu-Yuan Lin and Kuo-Chung Chang
- Applicability of Seismic Protective Systems to Structures with Vibration-Sensitive Equipment J. S. Hwang, Y. N. Huang, Y. H. Hung, and J. C. Huang
- 1685 Hurricane Damage Prediction Model for Residential Structures

 Jean-Paul Pinelli, Emil Simiu, Kurt Gurley, Chelakara Subramanian, Liang
 Zhang, Anne Cope, James J. Filliben, and Shahid Hamid
- 1692 Shear Strength Model for Lightly Reinforced Concrete Columns Halil Sezen and Jack P. Moehle
- 1704 Cost–Reliability Interaction in Life-Cycle Cost Optimization of Deteriorating Structures

 Jung S. Kong and Dan M. Frangopol
- 1713 Behavior and Modeling of Fiber Reinforced Polymer-Confined Concrete J. G. Teng and L. Lam
- 1724 Cellular Automata Approach to Durability Analysis of Concrete Structures in Aggressive Environments

 Fabio Biondini, Franco Bontempi, Dan M. Frangopol, and Pier Giorgio Malerba

contents continue on back cover



Technical Activities Division of the Structural Engineering Institute

contents continued from front cover

- 1738 Numerical Analysis of Mixed-Mode Fracture in Concrete Using Extended Fictitious Crack Model Zihai Shi
- 1748 Buckling of Linear Structures above the Surface and/or Underground Sohrab Baghery
- 1756 Design of Cold-Formed Steel Channel Columns with Complex Edge Stiffeners by Direct Strength Method

 Ben Young and Jintang Yan
- Design of Stiffened Elements in Cold-Formed Stainless Steel Sections Kim J. R. Rasmussen, Tim Burns, and Paul Bezkorovainy
- 1772 Compression Tests of Cold-Reduced High Strength Steel Sections. I: Stub Columns

 Demao Yang and Gregory J. Hancock
- 1782 Compression Tests of Cold-Reduced High Strength Steel Sections. II:
 Long Columns
 Demao Yang, Gregory J. Hancock, and Kim J. R. Rasmussen
- 1790 Improving the Ductility of Knee Joints between Rectangular Hollow Sections

 Lip H. Teh and Gregory J. Hancock
- 1799 Self-Drilling Screw Joints for Cold-Formed Channel Portal Frames

 Julie Mills and Roger LaBoube
- 1807 Tests on Cyclic Behavior of Concrete-Filled Hollow Structural Steel Columns after Exposure to the ISO-834 Standard Fire Lin-Hai Han and Xiao-Kang Lin
- Fire Resistance of Reinforced Concrete Columns Subjected to 1-, 2-, and 3-Face Heating

 K. H. Tan and Y. Yao
- 1829 Partial Factor Approach to Repetitive-Member System Factors

 David V. Rosowsky and Guangren Yu
- 1842 Stiffness and Deflection of Steel-Concrete Composite Beams under Negative Bending

 Jianguo Nie, Jiansheng Fan, and C. S. Cai

Technical Notes

1852 Elastic Stability of Planar Steel Frames with Unsymmetrical Beam Loading A. H. Salem, F. F. El Dib, M. El Aghoury, and M. T. Hanna

Discussions and Closures

- Discussion of "Analysis of Shear Lag Anomaly in Box Girders" by S. C. Lee, C. H. Yoo, and D. Y. Yoon

 M. Rovňák and A. Ďuricová
- 1861 Closure by S. C. Lee, C. H. Yoo., and D. Y. Yoon

American Society
of Civil Engineers

1801 Alexander Bell Drive
RESTON, VA 20191-4400

