

Dr Bijan Aalami's selected list of publications to illustrate fields of interest¹**(i) On Concrete Structures and Post-Tensioning**

Aalami, B. O., Aalami, F. B., Smilow, J., and Rahimian, A., (2016), "Novel Application of Post-Tensioning Solves High-Rise Design Challenges," Concrete International, American Concrete Institute, October 2016, pp 58-63

Aalami, B., (2015), "Post-Tensioning in Ground-Supported Slabs," PTI Journal, Post-Tensioning Institute, December 2016, PP. 5-16.

Aalami, B. O., (2007), "Critical Milestones in Development of Post-Tensioned Buildings," American Concrete Institute, (ACI) Concrete International, October 2007, pp 52-52.

Aalami, B. O. (2005), "*Structural Modeling and Analysis of Concrete Floor Slabs*," ACI, Concrete International, December 2005, pp. 39-43.

Aalami, B. O., and Jurgens, J. D. (2003), "*Guidelines for the Design of Post-Tensioned Floors*," American Concrete Institute, Concrete International Journal, March 2003, pp. 77-83. (2003)

Aalami, B. O. (2001) "*Software for the Design of Concrete Buildings*," American Concrete Institute, Concrete International Journal, December 29, 2001, pp. 28-35.

Aalami, B. O. "*Structural Modeling of Post-Tensioned Members*," Journal of Structural Engineering, ASCE, Vol. 126, No.2 Feb 2000, pp. 157-162

Aalami, B. O. "*Hyperstatic (Secondary) Actions in Prestressing and Their Computation*," Post-Tensioning Institute, Phoenix, PTI²-TN6, pp10, December 1998

Aalami, B. O., and Chegini, M. M., "*Structural Retrofitting of Cast-in-Place Concrete Parking Structures*," Proceedings, Third National Concrete and Masonry Engineering Conference, San Francisco, pp. 639-660, June 15-17, 1995.

Aalami, B. O., "*Unbonded and Bonded Post-Tensioning Systems in Building Construction - A design and Performance Review*," Post-Tensioning Institute, Phoenix, PTI-TN5, pp10, Sept 1994

Aalami, B. O., "*One-Way and Two-Way Post-Tensioned Floor Systems*," Post-Tensioning Institute, Phoenix, PTI-TN3, pp10, Feb 1994

Aalami, B. O., "*Strength Evaluation of Existing Post-Tensioned Beams and Slabs*," Post-Tensioning Institute, Phoenix, PTI-TN4, pp10, 1993

Aalami, B. O., "*Effective Width in Post-Tensioning*," Post-Tensioning Institute, Phoenix, PTI-TN5, pp 4, 1993

¹ Does not include over 100 Technical Notes on post-tensioning authored and distributed through ADAPT Corporation

² www.Post-Tensioning.org

Aalami, B. O., Co-authored, and/or compiled in capacity of committee member a number of concrete codes, such as ACI-318; ACI-423.

Aalami, B. O., "*Analysis and Design of Segmentally Constructed Bridges*," Proceedings, CONCET'93, Kuala Lumpur, Malaysia, TS2-1 to TS2-16, May 25-27, 1993.

Aalami, B. O., "*Developments in Analysis and Design of Post-Tensioned Buildings*," Proceedings, CONCET'93, Kuala Lumpur, Malaysia, May 25-27, 1993.

Aalami, B. O. "*Load Balancing - A Comprehensive Solution to Post-Tensioning*," Structural Journal, ACI, November-December 1990, pp 662-670.

Aalami, B. O., Barth F. G., Napior, K. and Pu D. C. "*Earthquake Performance of Unbonded Post-Tensioned Buildings; San Francisco Earthquake 1989*," Post-Tensioning Institute, Phoenix Sep. 1990, pp. 16.

Aalami, B. O. "*Developments in Post-Tensioned Floors in Buildings*," Proceedings, FIP-XIth International Congress, Hamburg, June 1990, pp S3-S9.

Aalami, B. O. "*Design of Post-Tensioned Floor Slabs*," ACI, Concrete International, V.11, No. 6, June 1989, pp. 59-67.

Aalami, B. O. and Barth F. G. "*Restraint Cracks and Their Mitigation in Unbonded Post-Tensioned Building Structures*", American Concrete Institute, SP113, 1989, also Post-Tensioning Institute 1988, pp. 157-202.

Barth F.G. and Aalami, B.O. "*Controlled Demolition of an Unbonded Post-Tensioned Concrete Slab*," Post-Tensioning Institute, Phoenix, 1989.

Aalami, B. O. and Swanson, D. T. "*Innovative Rehabilitation of a Parking Structure*," American Concrete Institute, Journal of Concrete International, February 1988.

Aalami, B. "*Moment-Rotation Relationship Between Column and Slab*", Journal of the American Concrete Institute, May 1972, pp 263-269.

Mehrain, M. and Aalami, B. "*Rotational Stiffness of Concrete Slabs*", Journal of the American Concrete Institute, September 1974, pp 429-435.

(ii) Software on Structural Concrete Developed and in Use in Over 75 Countries Across the World

Aalami, B. O., "*ADAPT-ABI*," for analysis of incrementally constructed prestressed and nonprestressed concrete bridges and frames.

Aalami, B. O., "*ADAPT-ABS*," for analysis of concrete box girder bridges with non-uniform plan geometry.

Aalami, B. O., "*ADAPT Post-Tensioning Software System*," for analysis and design of floor systems and beams.

Aalami, B. O., "*ADAPT-RC*," for analysis and design of concrete floor systems and beams.

Aalami, B. O., "*FELT Friction, Elongation and Long-Term stress losses in prestressing*

Aalami, B. O., "*PULT Ultimate strength analysis/design of prestressed members,*"

Aalami, B. O., and Bommer, A. "*ADAPT-Floor,*" a finite element two-dimensional analysis and design software for prestressed and nonprestressed slabs and floor systems.

(iii) On the vibrations and dynamics of structures

Aalami, B. O. "*Large Amplitude Vibrations of Rectangular Plates,*" Journal of Applied Mechanics, ASME, 1984, pp 935-937.

Aalami, B. "*Waves in Prismatic Bars of Arbitrary Cross-Section,*" Journal of Applied Mechanics, ASME, December 1973, pp 1067-1072.

Aalami, B. and Atzori, B. "*Flexural Vibrations and Timoshenko's Beam Theory,*" Journal of the American Institute of Aeronautics and Astronautics, May 1974, pp 679-685.

Aalami, B. O., and Javaherian, H., "*Free Vibrations of Rectangular Plates,*" Fourth Australasian Conference on the Mechanics of Structures and Materials, University of Queensland, Brisbane, 20-22nd, Aug, 1973, pp.1-8.

(iv) On the design of steel structures

Aalami, B. and Chapman, J.C. "*Large-Deflection Behavior of Rectangular Orthotropic Plates Under Transverse and Inplane Loads,*" Proceedings of the Institution of Civil Engineers, March 1969, pp 347-382 and November 1969, pp 263-264. London.

Aalami, B. "*Large-Deflection of Plates Under Patch Loading,*" Journal of the Structural Division, American Society of Civil Engineers, November 1972, pp 261-269.

Aalami, B. Moukhtarzadeh, A. and Mahmudi-Saati, P. "*On Strength Design of Ship Plates Under Inplane and Transverse Loading,*" Transactions of the Royal Institute of Naval Architects, November 1972, pp 519-534.

Aalami, B. "*Large-Deflection Stress Analysis of Rectangular Containers,*" Journal of Ship Research, US, December 1972, pp 261-269.

Williams, D.G. and Aalami, B. "*Some Considerations in Regard to the Strut Analysis of Compression Panels,*" Proceedings of the Institute of Engineers, Australia, January 1975.

Aalami, B. O., "*Analysis and Design of Cubic Liquid Containers,*" Conference on Stress and Strain in Engineering, National Conference Publication, no. 73/5, 1973, pp. 77-82

(v) On Communication Wave Guides

Aalami, B. "*Analysis and Behavior of Acoustic Surface Wave Guides,*" Institute of Electronics and Electrical Engineers, Transactions on Sonics and Ultrasonics, July 1973, pp 252-260.

(vi) On Education, Science and Technology Policies

Aalami, B. O. "*Finite Elements in Civil Engineering Education*," Proceedings, ASCE Conference on Civil Engineering Education, Columbus, OH, April 1985.

Aalami, B. "*Technology Assessment of the Third World Countries, With Special Reference to Iran*", Technology Assessment Conference, Honolulu, 1977, May 30-June 10.

Books

Aalami, B. O., "Post-Tensioned Buildings; Design and Construction," www.adaptsoft.com, www.PT-Structures.com, Rewood City, CA, Mar 2014, 450 pp

Aalami, O. B., and Bommer A. "DESIGN FUNDAMENTALS OF POST-TENSIONED CONCRETE FLOORS," Post-Tensioning Institute, Phoenix, AZ, April 1999

- ❖ Translated in Korean
- ❖ Translated in Croatian

Aalami, B. and Williams, D.G. *THIN PLATE DESIGN FOR TRANSVERSE LOADING*, John Wiley, USA, 1977, and Crosby Lockwood, UK, 1975.

Williams, D.G. and Aalami, B., *DESIGN OF THIN PLATES UNDER EDGE COMPRESSION*, Crosby Lockwood, UK, 1979.

