

**2010**

STRUCTURE® Annual Article Index

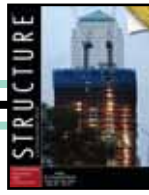
January 2010 – Concrete

#	Magazine Section	Article Title	Author
7	Editorial	The Right to Petition the Government	Douglas Ashcraft, P.E., S.E.
9	InFocus	Engineers Are Persons, Too	Jon A. Schmidt, P.E., SECB
10	C – Building Blocks	General Considerations for Post-Tensioned Slabs on Ground	Bryan Allred, S.E.
14	C – Education Issues	Alternatives to Matrix Methods – How to Teach Structural Behavior	Marc Hoit, Ph.D.
16	C – Technology	What Computers Might Be Able to Do	William M. Bulleit, Ph.D., P.E.
18	C – Structural Design	Post-Yield Stiffness Effects on Moment Redistribution in Continuous Reinforced Concrete Beams	Pedro Silva, Ph.D., P.E.
22	C – Structural Sustainability	“Extraordinary” Sustainable Thinking for “Ordinary” Projects	Ruben Aya-Welland, P.E., S.E., LEED AP
24	C – Engineer’s Notebook	Antiquated Structural Systems Series – Part 10	D. Matthew Stuart, P.E., S.E., F. ASCE, SECB
30	Feature	O-14: Elegant Rhythms in Concrete	Jaime M. Ocampo
32	Feature	Avalon Tower – New Residential Towers Employ High-Strength Rebar, Other Efficiencies	Sheila Bacon Cain
34	Feature	Special Section – Anchors, Piers, Foundations, and Underground Construction – Foundation Companies Working Their Way Through the Downturn	Larry Kahaner
45	D – Risk Management	Management Guidelines – Preventing/Mitigating Field Construction Problems	James Lefter, P.E., M. ASCE
48	D – Business Practices	Digital Signatures – Electrifying the Structural Engineering Workflow	Dr. Gadi Aharoni
50	D – Legal Perspectives	Cost Estimates, Project Budgets, and the Structural Engineer	David J. Hatem, Esq. and David M. Ponte, P.E.

Readers and Advertisers....

to advertise in STRUCTURE magazine contact sales@structuremag.org

send press releases and product articles to press@structuremag.org



February 2010 – Steel

Pg #	Magazine Section	Article Title	Author
5	Editorial	Understanding National Standards Provisions for Seismic Design	James Malley, S.E.
6	C – Structural Design	Structural Design of Steel Pipe Support Structures	Kasi V. Bendapudi, P.E., S.E.
10	C – Construction Issues	Planning to Minimize Damage to Buildings Adjacent to Construction Sites in Urban Environments	Milan Vatovec, Ph.D., P.E., Paul Kelley, P.E., Michael Brainerd, P.E., and Charles Russo, P.E.
14	C – Structural Performance	A Solution to Seismic Bracing Restrictions – Expanding the Acceptance of New Large HSS Sections	John W. Lawson, S.E.
16	C – Structural Sustainability	Can Using More Wood Reduce Your Environmental Footprint?	Roxane Ward
20	Feature	Cold-Formed Steel Façade Framing – Design Considerations	Anthony D. Coviello, P.E., S.E.
22	Feature	A Gem in the Mountains	Carol A. Stevens, P.E., SECB and Phillip A. Warnock, AIA, NCARB
24	D – InSights	Soil/Cement Slurry Strengthens Weak Soils	Jonathan Bussiere, E.I.T.
27	D – Quality Assurance Corner	Validating the Results of Structural Engineering Software	Clifford Schwinger, P.E., SECB and Eric J. Heller, E.I.T.
33	D – Spotlight	Upholding Tradition – Historic Structure Renovated From the Inside Out	Brent Bonham, P.E., S.E. and Jeffrey S. Adams, P.E.
41	C – Structural Forum	The Failure of the Five E's – The Pressing Need for Structural Licensing	Barry Arnold, P.E., S.E., SECB

March 2010 – Multihazard Design

Pg #	Magazine Section	Article Title	Author
7	Editorial	Life-Cycle Performance, Safety, Reliability and Risk of Structural Systems – A Framework for New Challenges	Dan M. Frangopol, Sc.D, P.E., F. ASCE and Bruce R. Ellingwood, Ph.D., P.E., F. ASCE
9	InFocus	Engineering as Willing	Jon A. Schmidt, P.E., SECB
10	C – Structural Sustainability	Achieving Sustainability through Durability, Adaptability, and Deconstructibility	Dirk M. Kestner, P.E., LEED AP and Mark D. Webster, P.E., LEED AP
14	C – Structural Design	The Rational Design of Anchored Masonry Veneer	W. Mark McGinley, Ph.D., P.E.
19	C – Codes & Standards	2008 Special Design Provisions for Wind and Seismic	Philip Line, P.E., Bradford K. Douglas, P.E., and Peter Mazikins, M.Eng, P.Eng
22	Feature	Second Opinion Leads to Substantial Savings in Evaluation and Repair of Marble Façade	William D. Bast, P.E., S.E., SECB, Scott G. Nacheman, M.Sc.Eng, AIA, R.A., Rachel L. Michelin, EIT, LEED® AP and Dziugas Reneckis, Ph.D., P.E.
26	C – Technology	Tips for Selecting Wood-Frame Structure Single-Member Sizing Software	Ross Theilen, P.E.
28	D – Risk Management	Total Recall – Written Communication, Documentation and Retention	Terrence M. Lindsay, P.E., S.E., SECB, Eric L. Singer, and Karen Erger
30	D – Legal Perspectives	RFIs and Shop Drawings – How to Manage Risk and Reduce Liability	David J. Hatem, PC and Peter C. Lenart, Esq.
32	D – InSights	Controlling Digital Documents with Project Information Management (PIM) Software	Bob Batcheler
42	C – Structural Forum	The Tidal Wave	Robert Mote, P.Eng



April 2010 – Concrete

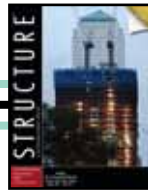
Pg #	Magazine Section	Article Title	Author
7	Editorial	The Benefits of Networking	Douglas Ashcraft, P.E., S.E.
8	C – Structural Design	Post-Tensioned Slabs on Ground – Part 2: Specific Design Considerations	Bryan Allred, S.E.
12	C – Practical Solutions	Heavily Loaded Strap Footings – Design, Detailing and Behavior	Truly Guzman, P.E. M.Sc
16	C – InSights	Educational Art – A Sculpture That Teaches!	Duane Ellifritt, Ph.D., P.E.
18	Feature	Shrinkage-Compensating Concrete in Post-Tensioned Buildings – A Four-Building Survey – Part One	Kenneth B. Bondy, S.E., FACI
23	D – Risk Management	Managing the Risks of BIM	Joseph M. Ales Jr., Ph.D., S.E.
34	C – Structural Forum	We Need to Work Together or Risk Being Torn Apart	Barry Arnold, S.E., SECB

May 2010 – Masonry

Pg #	Magazine Section	Article Title	Author
5	Editorial	Should Structural Engineers Seek Recognition?	Carrie Johnson, P.E.
7	InFocus	The Social Captivity of Engineering	Jon A. Schmidt, P.E., SECB
8	C – Structural Sustainability	Reducing Embodied Energy in Masonry Construction – Part 1: Understanding Embodied Energy in Masonry	Vivian Volz, RA, CSI, CCS, LEED AP and Eric Stovner, S.E., LEED AP
12	C – Structural Forensics	The Structural Investigation of a 19 th Century Manufacturing Complex	D. Matthew Stuart, P.E., S.E., F. ASCE, SECB
16	C – InSights	On Thinking Inelastically	M. Lee Marsh, Ph.D., P.E.
19	Special Section	NCSEA Basic Education Survey Results – Part 1	
22	Feature	Brick: Any Way You Want It	J. Gregg Borchelt, P.E.
26	Feature	Engineering for Heritage Masonry	Michael Schuller, P.E. and Glenn Boornazian
30	Special Section	Special Section – Steel Construction Materials, Products and Software	Larry Kahaner
41	D – Spotlight	Reinventing 690 Market Street – Historic Structure Reclaimed, Vertically Expanded	Navin R. Amin, S.E. and Vivian L.K. Wan, S.E.
43	D – Quality Assurance Corner	Tips for Reducing RFIs	Clifford Schwinger, P.E., SECB and Albert J. Meyer, Jr., P.E.
50	C – Structural Forum	The Two Sides of Responsibility	Emile W.J. Troup, P.E., SECB and William L. Livingston, P.E.

interested in writing an article for STRUCTURE[®] magazine?

contact: chair@structuremag.org



June 2010 – Tall Buildings/High Rise

Pg #	Magazine Section	Article Title	Author
7	Editorial	When Will You Become a Licensed SE?	Sam A. Rihani, P.E., F. ASCE
8	C – Structural Testing	Seismic Testing – Seven-Story Mixed-Use Steel and Wood Light-Frame Structure	Steven E. Pryor, P.E., S.E., John W. van de Lindt, Ph.D. and Shiling Pei, Ph.D.
13	C – Structural Performance	Steel Special Moment Frames: A Historic Perspective	Scott M. Adan, Ph.D., P.E., S.E. and Ronald O. Hamburger, S.E., SECB
16	Special Section	Seismic Products, Performance Based Design – The Legacy of Northridge Lives On	Larry Kahanar
24	Feature	High Performance Economics	Paul W. McMullin, Ph.D., S.E. and Ronald H. Dunn, S.E.
26	Feature	The Leaning Towers of Vegas – Veer™ Towers, CityCenter, Las Vegas, NV	Neb Erakovic, PEng, Terry Dawson, BEng, and Kyle Cossette, BSc
30	Feature	Nakheel Super Tall Tower	Ahmad Rahimian, Ph.D., S.E., P.E., Kamran Moazami, P.E., M. ASCE and Bart Sullivan, P.E.
35	Feature	Mineta San Jose International Airport – Delivering Form and Function	Terry L. Palmer, P.E.
38	D – InSights	Advanced Composites for Structural Strengthening – The State of the Industry	Scott F. Arnold, P.E.
41	D – Spotlight	The Cathedral of Christ the Light – Sacred Geometry, Luminosity, and Longevity	Mark Sarkisian, P.E., S.E., LEED® AP, M. ASCE, Peter Lee, P.E., S.E., LEED® AP, M. ASCE, and Eric Long, P.E., S.E., LEED® AP, M. ASCE
48	D – Risk Management	Further Commentary on AIA Document C401-2007	Roger Stroud P.E., FACEC and Ronald White, P.E.
50	C – Structural Forum	Mitigating Terrorist Attacks and Earthquake Risk – International Building Code Revisions Can Provide Solutions	James Lefter, P.E.

July 2010 – Concrete

Pg #	Magazine Section	Article Title	Author
5	Editorial	What Business Are You In?	John A. Mercer Jr, P.E.
7	InFocus	Engineers Are from Aristotle	Jon A. Schmidt, P.E., SECB
8	C – Guest Column	Seismic Design of Concrete Parking Structure Ramps	Seismology Committee, Structural Engineers Association of California
12	C – Structural Design	Post-Tensioned Slabs on Ground – Part 3: Proper Detailing and Quality Control	Bryan Allred, S.E.
16	C – Structural Practices	Sea Wall Systems – Sea Wall vs. Bulkhead	Vitaly B. Feygin, P.E.
20	Feature	Barton Creek Bridge	Mark W. Holmberg, P.E.
22	C – Building Blocks	Service Life of a Structural Retrofit – Engineering Judgment is a Key Element When Using FRP Advanced Composite Materials	Zachery I. Smith, P.E., Scott F. Arnold, P.E., and Guijun Xian, Ph.D.
26	D – InSights	Curved Steel: Means and Methods	Erin J. Gachne Conaway, P.E., LEED AP and Jacinda L. Collins, P.E.
34	C – Structural Forum	The Case for System-Based Structural Design	Avinash M. Nafday, Ph.D., M.B.A., P.E.

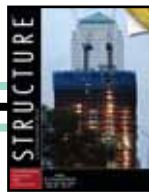


August 2010 – Light Frame Buildings

Pg #	Magazine Section	Article Title	Author
7	Editorial	NCSEA's 2011-2015 Strategic Plan	James Malley, S.E.
8	C – Structural Design	Multiple-Bolt Wood Connection Design Topics	Donald A. Bender, P.E., Ph.D. and Frank E. Woeste, P.E., Ph.D.
12	C – Building Blocks	The Truth about Corrosion in Self-Drilling/Self-Tapping Screws	Dana Benton, P.E.
16	C – Structural Performance	Is Roof Eave Blocking Required To Transmit Wind/Seismic Forces?	Felix Martin, S.E.
19	Special Section	NCSEA Basic Education Survey Curriculum Results – Part 2	
23	C – Guest Column	Anchor Bolts in Light-Frame Construction at Small Edge Distances	Seismology Committee, Structural Engineers Association of California
26	C – Codes & Standards	Anchorage Design for Pre-Fabricated Shear Panels in Light-Framed Structures	Renee Strand, P.E.
30	Feature	BIM – Dimensional and Material Quantity Control of Wood-Framed Construction	Matthew H. Johnson, P.E. and Ariane I. Fund
32	Feature	The Expanding Use of Wood in School Construction	Roxane Ward
36	Special Section	Engineering Software – Software Becomes Easier to Use, More Transparent with Greater Interoperability	Larry Kahanar
52	D – Legal Perspectives	What's a Structural Engineer to Do? – The Collaborative World of Building Information Modeling and Integrated Project Delivery	David J. Hatem, PC and Sue Yoakum, Esq., AIA
54	D – Quality Assurance Corner	Tips for Designing Constructible Steel-Framed Structures – Part 1	Clifford W. Schwinger, P.E., SECB and Todd R. Campbell, P.E.
56	D – Great Achievements	Gustav Lindenthal	Frank Griggs, Jr., Ph.D., P.E., P.L.S.
58	D – InSights	HSS Connections	Leigh Arber and Erika Winters-Downey, S.E., LEED AP
59	D – Spotlight	Project FROG Leaps Ahead in High-Performance Learning Environments	Alethea O'Dell
66	C – Structural Forum	Project Specific Peer Review Guidelines – A Professional Odyssey	D. Matthew Stuart, P.E., S.E., F. ASCE, SECB

September 2010 – Construction

Pg #	Magazine Section	Article Title	Author
7	Editorial	Corporate Social Responsibility	Avery Louise Bang, M.Sc.
9	InFocus	Artifacts and Functions	Jon A. Schmidt, P.E., SECB
10	C – Construction Issues	Mitigation of Damage to Buildings Adjacent to Construction Sites in Urban Environments	Milan Vatovec, Ph.D., P.E., Paul Kelley, P.E., Michael Brainerd, P.E. and Charles Russo, P.E.
14	C – Historic Structures	Evaluating Historic Structures for Adaptive Re-Use	Dominick R. Pilla, P.E., C.E., S.E., R.A. and Xiaoli Tong, P.E.
18	C – Structural Forensics	Building Façade Inspection – Part 1: Considerations	Scott L. Weiland, P.E., Stephen L. Morgan, E.I. and J. Trey Thomas, E.I.
20	C – Building Blocks	Structural Contributions to LEED®	Chris Hofheins, S.E., MBA, LEED AP



22	C – Structural Practices	A Rational Method to Design Vehicular Barriers	Mohammad Iqbal, D. Sc., P.E., S.E., Esq.
26	Feature	Haiti – The Country That Time Has Left Behind	Craig E. Barnes, P.E. SECB
30	Feature	NCSEA 2010 Conference Section	
34	Feature	Vertical Structural Deformation – Estimation and Control for a Deformation-Sensitive Building	Songtao Liao, Ph.D., P.E., M. ASCE, Gabriel Klein, P.E., Yevgeny Mikhlin, Ph.D., P.E. and Jacob S. Grossman, MSCE, FACI, P.E., SECB
38	C – Structural Design	Discussion on Structural Design of Steel Pipe Support Structures	Kasi V. Bendapudi, P.E., S.E.
42	C – Structural Sustainability	Reducing Embodied Energy in Masonry Construction – Part 2: Evaluating New Masonry Materials	Vivian Volz, RA, CSI, CCS, LEED AP and Eric Stovner, S.E., LEED AP
48	D – CASE Risk Management	Training our New Engineers and Making Sense of Risk Management Information	Stacy J. Bartoletti, S.E.
49	C – InSights	The Dots Are Connected in Today's Digital BIM Workflow	Robert Middlebrooks, AIA and Scott Hammond
56	D – Spotlight	122 Design Tips in 90 Minutes – Best Presentation at the 2010 Structures Congress/NASCC: The Steel Conference	Joyce E. Copelan, P.E., M. ASCE, SEI Sacramento Section Chair and Craig A. Copelan, P.E., M. ASCE
57	C – Structural Forum	Are Young Engineers Unprepared? – A Young Engineer Answers	Eytan Solomon, P.E., LEED AP

October 2010 – Bridges

Pg #	Magazine Section	Article Title	Author
7	Editorial	Is A Quantum Leap In Your Future?	John A. Mercer Jr. P.E.
8	C – Building Blocks	Applying Recycled Plastic Lumber Technology to Short-Span Bridges	George F. Assis, Ph.D., P.E.
10	C – Structural Forensics	Building Façade Inspection – Part 2: Procedures	Scott L. Weiland, P.E., Stephen L. Morgan, E.I. and J. Trey Thomas, E.I.
12	C – Structural Design	Design of Expansion Joints in Parking Structures	Mohammad Iqbal, D. Sc., P.E., S.E., Esq.
16	C – Technology	What Can Open Source Structural Software Do For You?	Arturo Montalva, P.E., Jeff Baylor, and Klaus Wittig
18	Feature	Arched Beauty – Timber Bridge Fills the Gap in Washington Rails-to-Trails Project	Paul Gilham, P.E., S.E.
23	C – Structural Sustainability	Sustainable Structures for the Bridge Engineer	Daniel Whittemore, P.E., LEED AP
26	D – InSights	Perspectives on ASCE 41 for Seismic Rehabilitation of Buildings	Existing Buildings Committee, Structural Engineers Association of Northern California (SEAONC)
27	D – Spotlight	The Kingsway Pedestrian Bridge	Paul A. Fast, P.Eng, Struct.Eng
34	C – Structural Forum	Portability, Reciprocity, Comity and You	Barry Arnold, S.E., SECB



November 2010 – Steel

Pg #	Magazine Section	Article Title	Author
7	Editorial	“Ask What You Want and Want What You Ask”	C. Ben Nelson, P.E., SECB
9	InFocus	Rethinking Engineering Ethics	Jon A. Schmidt, P.E., SECB
10	C – Structural Performance	Steel Special Moment Frames – Connection Seismic Requirements	Scott M. Adan, Ph.D., S.E., SECB and Ronald O. Hamburger, S.E., SECB
14	C – Outside the Box	More Wind Power Requires Taller Towers – Taller Towers Require Innovation...	Peder Hansen
16	C – InSights	Anchorage Requirements for Wood Frame Shear Walls	John R. Henry, P.E.
18	C – Structural Practices	Comparison of Geometric Axis and Principal Axis Bending in Single Angles	Whitney McNulty, P.E., SECB
22	Feature	Investigation of Distress in the South Tower of the Milwaukee City Hall	Steven DelloRusso, P.E., Brent Gabby, P.E. and Donald Dusenberry, P.E.
26	D – Great Achievements	James Buchanan Eads – Engineer, Innovator and Inventor Extraordinaire	Richard G. Weingardt, P.E.
33	D – Quality Assurance	Tips for Designing Constructible Steel-Framed Structures – Part 2	Clifford W. Schwinger, P.E., SECB and Todd R. Campbell, P.E.
42	C – Structural Forum	Endangered Species: Structural Engineer	Ann Marie Garko-Hill, P.E.

December 2010 – Soils & Foundations

Pg #	Magazine Section	Article Title	Author
7	Editorial	Update on ASCE/SEI 7-10 and the 2012 IBC	Robert Bachman, P.E., S.E., and James Harris, P.E., S.E., Ph.D.
8	C – Structural Design	Post-Tensioned Slabs on Ground – Part 4: Existing Foundations	Bryan Allred, S.E.
12	C – Lessons Learned	Structural Collapses During Construction – Lessons Learned, 1990-2008	Mohammad Ayub, P.E., S.E.
16	C – Codes and Standards	Changes in Codes, Standards and Practices Following Structural Failures – Part 1: Bridges	Robert T. Ratay, Ph.D., P.E.
23	Feature	Augercast Piles in Hawaii	James W. Niehoff, P.E.
26	Feature	Excellence in Structural Engineering – NCSEA 13th Annual Awards Program	National Council for Structural Engineers Associations
36	C – InSights	Sustainable Design for Structural Engineers	Michael Teller, A.I.A., NCARB, LEED AP and Jillian Bergman
38	D – Great Achievements	Leffert Lefferts Buck	Frank Griggs, Jr., Ph.D., P.E., P.L.S.
41	D – Risk Management	Duty to Defend – Recent Court Cases Confirm the Dangers	Dave Collings
50	C – Structural Forum	Excellence in Structural Engineering – Are You a Winner?	Thomas F. Heausler, P.E., S.E., SECB