

Seminar Description:

The presentations will focus on analysis, design and construction fundamentals of post-tensioned buildings, with an emphasis on durability of present PT-systems. Key concepts, code requirements, examples and practical design and construction tips will be discussed. Highlights of the course include:

- **Post-Tensioning Technology** — Materials, fabrication, installation procedures, common PT systems and applicable specifications and certification to ensure durability will be described.
- **Analysis & Design** — Key concepts such as load balancing, secondary moments and prestress losses will be explained. An example will be used to illustrate these concepts. Applicable code requirements will be identified and their impact on design discussed.
- **Applications** — Project examples will be presented to illustrate various uses of PT in buildings as well as how tendons are laid out in common PT floor systems. The use of external post-tensioning in the retrofit of an existing slab will also be discussed. Facts and myths about post-tensioned vs. reinforced concrete slabs will also be covered.
- **Construction** — Installation techniques will be explained. Issues related to drawing review, inspection, certification, and interaction with other trades such as electricians, plumbers, etc. will be discussed.



Who Should Attend: The seminar is intended to provide a basic understanding of post-tensioning. It will benefit anyone who would like to develop a fundamental understanding of post-tensioning design and construction concepts, including:

- Students
- Structural Engineers
- Contractors & Installers
- Inspectors
- Architects
- Project Managers
- Code Specifiers
- Municipal & Building Officials

Speaker Faculty— the seminar will be presented by two of the following:

Bryan Allred, P.E., S.E.

Vice President, Seneca Structural Engineering

Mr. Allred has extensive experience in post-tensioning design. He is a member of the Structural Engineers of Association of California (SEAOC), ACI, and PTI. His primary consulting practice is in the design of post-tensioned concrete buildings, as well as the use of post-tensioning in the retrofit of existing structures. Mr. Allred has taught numerous structural engineering courses at both Cal Poly-Pomona and UC-Irvine.

Cary Kopczynski, P.E., S.E., FACI

President, Cary Kopczynski & Company, Inc. PS

CKC, Bellevue, Washington is a structural engineering firm active in the design of post-tensioned concrete buildings throughout the United States and beyond. The firm's projects include apartment and condominium towers, office buildings, hotels, and parking structures. Mr. Kopczynski served on the ACI Strategic Planning Committee, is a member of ACI Committee 318, Structural Concrete Building Code, a past member of ACI 352 and ACI 368, and is a past president of the Washington State Chapter of ACI. He chairs the Technical Advisory Board of PTI and serves on the PTI Board of Directors. Mr. Kopczynski was selected by ENR magazine as one of the Top 25 Newsmakers in 2007 based on his pioneering work in the field of high-strength reinforcing bar.

Miroslav F. Vejvoda, MBA, P.E.

Technical Director, Post-Tensioning Institute

Mr. Vejvoda is responsible for PTI's technical publication development, is Secretary of the Technical Advisory Board (TAB), and is the Editor of the PTI JOURNAL. He provides technical assistance on matters related to post-tensioning design and construction. He has been involved in the design and construction of all kinds of PT applications across the U.S. and Europe for over 20 years. He is a member of ACI and a Fellow of ASCE, is a member of the Joint ACI-ASCE Committee 423, Prestressed Concrete, and member of ACI Committees 350, Environmental Engineering Concrete Structures, and 362, Parking Structures.

Donald P. Kline, P.E.

Kline Engineering & Consulting

Mr. Kline has over 19 years of experience in the design and construction of post-tensioned concrete structures. In his consulting practice, Mr. Kline specializes in the design of new post-tensioned concrete buildings and provides consulting services related to the evaluation, repair, and strengthening of existing concrete structures. Prior to forming his consulting structural engineering practice, he was Branch Manager for VSL in Springfield, VA.

Seminar: Durability of Today's Post-Tensioning: Design, Analysis, and Construction



SEMINAR SCHEDULE

Registration: 7:00 a.m. - 8:00 a.m.
Sessions: 8:00 a.m. - 12:00 p.m.



Vancouver, BC, Canada
November 23, 2009
Best Western Chateau Granville
1100 Granville Street
Vancouver, BC, Canada
www.chateaugranville.com



PDH/CEU Credits

PTI follows all of the guidelines required to award Personal Development Hours (PDH)/Continuing Education Units (CEU). A total of 4 PDH/0.4 CEU credits will be awarded to each participant who successfully completes the seminar.

Seminar Fee		Optional Publications—Discounted prices available to seminar attendees	
PTI Members:	U.S. \$130.00	PTI Post-Tensioning Manual, 6th Edition (an \$112.50 value)	U.S. \$75
Non-Members:	U.S. \$160.00	PTI Floor Design Bundle (includes Design of Post-Tensioned Slabs Using Unbonded Tendons & Design Fundamentals of Post-Tensioned Concrete Floors—a \$100 value)	U.S. \$60
<p>Fee includes free PTI course materials, a continental breakfast, and refreshments, but does not include hotel accommodation. Optional publications are available at significant savings to seminar participants and will be delivered to the seminar for those who pre-order and pre-register. <i>Cancellations:</i> PTI will refund the registration fee if cancelled 5 days in advance of the seminar date. Refund requests after that are subject to a \$25 processing fee.</p>			

Method of Payment:

Credit Card (Visa, MasterCard, American Express or Discover only)

Check (payable to Post-Tensioning Institute)

PTI Member

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To register online, go to www.post-tensioning.org. Under the Education tab, select Education Resources and scroll down to seminars. There is also a link to online seminar registration and seminar information at the bottom of PTI's home page.

You may also return this completed form to PTI by fax or mail:

Fax: (248) 848-3181 Address: 38800 Country Club Drive, Farmington Hills, MI 48331.