

# POST-TENSIONED CONCRETE SLABS-ON-GROUND - DESIGN FUNDAMENTALS

## SEMINAR - PART 1 OF 2

HALF DAY, 4 HOURS (4 PDHs / 0.4 CEUs)

**Who should attend:** Engineers and contractors new to post-tensioned slab-on-ground (SOG) design or anyone interested in post-tensioned slab-on-ground design fundamentals.

### Program Content:

#### INTRODUCTION

- History and development of PT SOG
- Advantages of PT SOG
- Applications

#### GEOTECHNICAL INVESTIGATION

- Field investigation
- Laboratory testing
- Soil-structure interaction
- Movement modes
- Geotechnical report

#### STRUCTURAL DESIGN

- Design process overview
- Design parameters
- Design procedures

#### STRUCTURAL DESIGN EXAMPLES

- PTI-1 Lightly reinforced slabs on stable soils
- PTI-2 Ribbed SOG for expansive sites
- PTI-3 Uniformed thickness SOG
- Special design issues

#### CERTIFICATION AND PTI RESOURCES

- Certification levels and workshops
- PTI resources

#### OPEN Q&A

### Learning Objectives:

- Identify geotechnical considerations.
- Understand soil support parameters and soil-structure interaction assumptions.
- Understand minimum requirements for design of shallow post-tensioned slab-on-ground foundations.
- Discuss design examples for post-tensioned slab-on-ground foundations for different soil support conditions.
- Recognize applicable code sections and design resources.

### Instructors:

PTI engineers and industry experts

### Related Documents:

*To expand attendees' knowledge, copies of related documents may be purchased at the PTI Store with a one-time special discount of 25% off the regular price. Contact [pti.bookstore@post-tensioning.org](mailto:pti.bookstore@post-tensioning.org) for more details.*

- Standard Requirements for Design and Analysis of Shallow Post-Tensioned Concrete Foundations on Expansive and Stable Soils (DC10.5)
- Design of Post-Tensioned Slabs-on-Ground (DC10.1)
- Construction and Maintenance Manual for Post-Tensioned Slab-on-Ground Foundations (DC10.2)