What's New from aci

TECHNICAL DOCUMENTS

ACI/*fib* International Symposium on Punching Shear in Structural Concrete Slabs: Honoring Neil M. Hawkins (SP-315)

This volume contains the technical papers presented in three sessions as part of an international symposium held in Philadelphia, PA, USA, on October 25, 2016. The papers cover key aspects related to punching shear of structural concrete slabs under different loading conditions, the study of size effect on punching capacity of slabs, the effect of slab reinforcement ratio on the response and failure mode of slabs, without and with shear reinforcement, and its implications for the design and formulation in codes of practice, an examination of different analytical tools to predict the punching shear response of slabs, the study of the post-punching response of concrete slabs, the evaluation of design provisions in modern codes based on recent experimental evidence, and new punching shear theories.

ACI UNIVERSITY ONLINE COURSES

On-Demand Course: Two-Way Slab Systems: Recent Developments and Showcases on Design, Analysis, Construction, and Evaluation Methods

Learning Objectives

1. Identify how the new ACI 421.3R, "Guide to Design of Reinforced Concrete Two-Way Slab Systems," helps design engineers to analyze conventional reinforced two-way concrete flat-slab and flat slab-to-column connection designs.
2. Examine historical research and current code provisions for two-way slab designs and slab-to-column punching shear capacity designs.
3. Compare different design methods for two-way slabs and identify the appropriate method for different design circumstances.
4. Compare results of impact load tests on conventionally reinforced concrete slabs with those on similar slabs containing added fiber reinforcement.

Continuing Education Credit: 0.1 CEU (1 PDH)

On-Demand Course: Using ACI 318-14 for the Design of Shear Walls and Earthquake-Resistant Shear Walls

Learning Objectives

1. Describe the simplified design method of designing walls that support combined axial load and in-plane or out-of-plane bending moment, and how the unbraced length and the degree of rigidity of supports affect the ultimate design capacity of the wall.
2. Explain the in-plane shear capacity of walls and the differences between tall walls and short or squat walls.
3. Explain longitudinal and transverse reinforcing detailing of walls and detailing around wall openings.
4. Describe the design of shear walls of buildings in seismic categories D, E, and F using "boundary elements" to support combined axial and in-plane bending.

Continuing Education Credit: 0.1 CEU (1.0 PDH)
This on-demand course is also available in Spanish.