

ACI COMMITTEE 377 (First Meeting)
Performance-Based Structural Integrity & Resilience of
Concrete Structures

ACI Fall Convention
Toronto, ON

Monday, October 22, 2012
10:00 am– 12:30 pm
New Location: **Norfolk (Mezzanine Level)**

Agenda

1. Welcome and Introductions
2. A brief review of ACI 318 structural integrity requirements and their changes since 1989 (Sasani)
3. A brief evaluation of ACI 318 structural integrity requirements (Sasani)
4. **Mission statement** (all)
Draft statement: Develop structural integrity and resilience guidelines that provide minimum levels of protection against local damage for different types of structures and performance levels.
5. List of **Goals** (all)
Draft:
 - 5.1) Identify different collapse resisting mechanisms and their relative importance in load redistribution after initial damage;
 - 5.2) Examine the current ACI 318 integrity requirements;
 - 5.3) Determine if minor changes in reinforcement detailing can enhance structural integrity and resilience;
 - 5.4) Long term goals: Propose functional and disaster-resilient design methods for structural components and systems through
 - 5.4.1) Prescriptive approaches (using simplified analyses along with reinforcement detailing) and
 - 5.4.2) Performance-based approaches (using more elaborate analyses and designs).
6. Formation of a **task group** (task groups) to develop a report to the committee by the next meeting on:
 - 6.1) Identifying different collapse resisting mechanisms and their relative importance in load redistribution after initial damage;
 - 6.2) Examining the current ACI 318 integrity requirements;
7. Activities of other committees involved in structural integrity and disproportionate collapse mitigation (ASCE/SEI, AISC, PCI, ...?) and our collaboration with them (all)
8. Presentation: **Collapse of composite floor systems** in steel framed structures (Williamson)
9. Presentation: **New Structural Integrity Requirements in New York City Building code** (Gilsanz)
10. Adjournment