

SESOC takes great pleasure in publishing the following papers which have arisen from the ReCast Floors project. These papers relate to the performance of precast concrete floors in New Zealand including related design issues and retrofitting. The papers have been collated to provide comprehensive guidance for structural engineers and as stated in the introductory paper, ReCast Floors Project: Overview and Key Recommendations (Elwood,

Brooke, Hogan), the Recast Floors project has two primary aims:

- Improving understanding of the likely behaviour of precast floors during earthquakes, including the performance of earthquake-damaged precast concrete floors, and
- Developing and validating methods for improving the performance of existing precast concrete floors.

### **SPECIAL EDITION SESOC RECAST ISSUE**

- **Recast Floors Project: Overview and Key Recommendations**
- **Overview of retrofit requirements and techniques for precast concrete floors**
- **Design recommendations for seating angles**
- **Design recommendations for strongback retrofits**
- **Seismic performance of precast hollow-core floors with modern detailing – A case study**
- **Real world experience of seismic performance and retrofits used in buildings with hollow-core floors**
- **Torsional capacity assessment of precast hollow-core floors**
- **Seismic damage observations of precast hollow-core floors from two full-scale super-assembly tests**
- **Load-path and stiffness degradation of floor diaphragms in reinforced concrete buildings subjected to lateral loading - Part I, Experimental Observations**
- **Load-path and stiffness degradation of floor diaphragms in reinforced concrete buildings subjected to lateral loading – Part II, Data Analysis**
- **Strategies for finite element modelling of precast pre-stressed hollow-core floors**