Steel Reinforcement Institute of Australia

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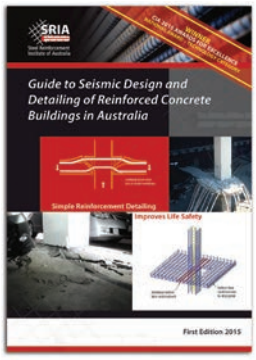
GUIDE TO SEISMIC DESIGN AND DETAILING OF REINFORCED CONCRETE BUILDINGS IN AUSTRALIA



This new Guide was published on 28 September 2015 and a pdf copy is available for free download from the SRIA website at www.sria.com.au. The Guide addresses the need for Engineers to improve the level of understanding of reinforced concrete structures under cyclic seismic loading. The Guide highlights that it is of fundamental importance for designers to understand that concrete design and detailing are inseparable in order to achieve the successful system performance.

The publication was awarded the CIA's National Award for Excellence in Concrete – Technology Category, at the recent 2015 Biennial Conference.

We encourage Engineers to download and review this important new Guide, as all buildings in Australia (other than residential buildings up to 8.5 in height) need to be designed for seismic actions in order to satisfy the Building Code of Australia (BCA).

UPDATES

National Seminar Series on Seismic Design and Detailing of Reinforced Concrete Buildings in Australia

The SRIA in conjunction with the Concrete Institute of Australia (CIA) and supported by Australasian Earthquake Engineering Society (AEES) are delivering a series of seminars around Australia providing designer/specifiers with the opportunity to learn from a number of preeminent speakers including the principle authors being the former chairman of AS 1170.4 and also the incoming President of AEES. The seminars are being held during April and May 2016 as follows:

Canberra – Tuesday 26th April

Adelaide – Monday 2nd May

Melbourne – Wednesday 4th May

Brisbane – Monday 9th May

Sydney – Tuesday 10th May

Perth – Monday 16th May

Registrations are now open via the CIA website. An email notification will also be issued to those that have already downloaded the new Guide from the SRIA website or by filling out the details on the back of this newsletter.

Residential Concrete Pavements

BD-098 has been active over the past several months in developing a draft of AS 3727 Pavements Part 1: Residential. This will supersede the 1993 Guide to residential pavements and include concrete, segmental and asphalt/bituminous spray-sealed pavements for residential applications.

Some significant changes to incorporate the technological advances of the past two decades including performance, materials and construction practices have been brought into the revision. The public comment draft should be available from Standards Australia early 2016 for review and comment.

Stress Development and Lap Splicing of Reinforcement

This new SRIA technical document is being finalised following the publication of AS 3600 Supplement 1:2014 Concrete structures-Commentary and will be available for free download from the SRIA website in 2016. It explains the theory behind the current rules in AS 3600, provides guidance and recommendations on the values for some of the factors and includes design tables that provide development and lap lengths of bars for various parameters and applications. Most importantly it will also provide the designer with guidance on the calculation of refined development and lap lengths along with fully worked examples.

Certification of Reinforcing Steels

Steel reinforcement procurement is not immune to the traceability and quality risks that are experienced in the modern global supply chain. Designer/specifiers need to be even more vigilant and verify their requirements, prior to providing project design certification, by obtaining valid independent certification of the reinforcing products specified. SRIA has contributed to the development of the Australasian Procurement and Construction Council (APCC) Guide called *Procurement of Construction Products, A guide to achieving compliance*. This recently revised publication is freely available from the APCC website at http://www.apcc.gov.au and provides the guidance to the entire construction market on this important verification process.

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The Australasian Certification Authority for Reinforcing and Structural Steels (ACRS) is one such scheme. This is an independent third party certifier of reinforcing products that can be used to verify materials in Australian projects. All Engineers should be requesting an ACRS (or equivalent) certificate for the supply of the cut and bent reinforcing bar or mesh product to their projects. Reinforcing materials can be supplied from a Mill as Australian Standard compliant but these properties can be lost in processing without quality control and verification. In our global supply chain environment this process is required no matter how small the project as an assurance that the material meets the requirements of AS/NZS 4671 Steel reinforcing materials and is therefore delivering the performance requirements of the design standards such as AS 2870, AS 3600 or AS 5100.

ACRS do certify products from overseas, but as certificates are web-based and therefore printed copies are 'uncontrolled', how do you know if an ACRS Certificate is genuine? Simply log onto the ACRS web site (www.steelcertification.com) to check the validity of any certificate by searching for the company under 'Certificate Holders' and verifying that the company has a certificate for the specific product. Further information is available on the ACRS website including understanding ACRS Certificates and Compliance Checklists.

SERVICES SRIA PROVIDES

- Publications
- Technical support
- Office seminars
- Special research
- Industry leadership
- Professional development
- Awarding excellence
- Industry linkage
- Australian Standards

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SRIA REGISTRATION FORM

To keep informed of the most recent industry developments, releases and presentations on steel reinforcement and to maintain your professional development, register now for the SRIA website database. Your details will remain highly confidential and we will ensure your reinforcement knowledge remains up-to-date.

You may register online at
www.sria.com.au/registration.html

or fill out your details below :

Title: ❑ Mr ❑ Mrs ❑ Ms ❑ Dr

First name: _____

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❑ **Tick** to receive email advice for your registration to attend the 2016 Seismic Guide National Seminar Series

and email, fax or post your details to SRIA National Office:

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