



Design of Portal Frame Buildings (incl Crane Runway Beams and Monorails)

This popular seminar returns to improve designer knowledge and confidence in the design of portal frame buildings, monorails and crane runway beams. It will include information on loads, purlins and girts, frame design, frame connections, roof and wall bracing, footings and slabs, gantry cranes and monorails. It supports the ASI publication '**Design of portal frame buildings including crane runway beams and monorails**' which incorporates significant changes to the 2011 Wind Code. Information on roller shutter door design and deflection limits for crane supporting frames will be presented. There will be a focus on practical issues and pitfalls. **Attendees can purchase the above publication at a special discount.**

Program

- 12.00pm** Registration and light lunch
- 12:30pm** Introduction, key changes, grey areas in design
 Loads - dead, live, wind and seismic; changes in AS/NZS 1170.2 Wind Code, including the changes to internal pressures in Amendment 4 released in 2016
 Purlins and girts, roof and wall sheeting, local pressure factor of 3.0, effect of elongated local pressure patches, combination factor K_c
 Frame design, columns, rafters, lateral restraints, end wall frames, deflections, roller shutter doors
- 2.30pm** Afternoon tea
- 3.00pm** Frame connections, knee and ridge joints, base plates, end wall columns
 Roof and wall bracing, tubes and angles in tension, tubes in compression
 Footings and slabs, uplift forces, pad footings, bored piers, holding down bolts, joint design
 Crane runway beams and supporting structures, deflection limits including discussion of the 10 mm sway limit, monorails including cantilevers, unequal trolley wheel loads, loading at or below bottom flange
- 5.00 pm** Finish

Presenter

Dr Scott Woolcock, is a consulting engineer and co-author of the ASI publication, **Design of portal frame buildings including crane runway beams and monorails**. He is a member of the Standards Australia Wind Code Committee responsible for AS/NZS 1170.2.

Engineers attending this seminar may gain CPD points to meet Engineers Australia requirements.

EA or WTIA Members who are not ASI members should email margritc@steel.org.au with current proof of membership to obtain the promotion code to access the WTIA/EA Member reduced fee.

Technical Partner

Seminar Package

Seminar Notes (PDF)
 Discount on publication
 Light lunch on arrival
 Afternoon Tea

Seminar Fee (incl GST)

\$375 ASI Member
 \$455 EA/WTIA Member
 \$535 Non-Member

| Location | Date | Venue |
|-----------|--------------------|--|
| Brisbane | Monday 12 March | Brisbane Convention & Exhibition Centre, Cnr of Merivale & Glenelg Streets, South Bank |
| Sydney | Wednesday 14 March | Rydges North Sydney, 54 McLaren Street, North Sydney |
| Melbourne | Thursday 15 March | TBA |
| Adelaide | Wednesday 21 March | Education Development Centre, 4 Milner Street, Hindmarsh |
| Perth | Thursday 22 March | Royal Perth Golf Club, Labouchere Road, South Perth |

Register online at: <http://steel.org.au/events/asi-events>