Australian Institute of Architects | Refuel

1 Formal CPD Point

CPD LIVE

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This CPD seminar entitles you to 1 formal CPD point. Please be aware you are required to manage your own CPD records. We will provide you with your participation certificate and CPD evaluation based on our attendance records post event and your completion of the below questionnaire.

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The below answer sheet is for your own self-assessment.
Please keep your completed questionnaires and answers on file for your record.
These do not need to be sent to the AIA or to CPD Live. CPD-Live will send you a Refuel certificate.

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CORROSION PROTECTION: CONTRIBUTING TO SUSTAINABILITY

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REMEDY ASSET PROTECTION
CORROSION CONSULTANTS FOR CONCRETE REPAIR AND STEEL PROTECTION

1. **What is corrosion and how does it affect the Australian construction sector?**
   Corrosion is nature's way of bringing materials to their lowest energy state. Though inevitable in all architectural steelwork, it is most pronounced on buildings that are situated close to salt water.
2. **What affect does corrosion have on the sustainability of the built environment?**
   If not correctly managed, corrosion results in the need to replace affected materials. In turn, this means increased waste, increased production and associated emissions, increased embodied carbon, and so forth.
3. **In Australia, what are the regulations regarding corrosion in the construction industry?**
   They include the National Construction Code (NCC) 2016: Volume 2: Table 3.4.4.2; the Australian Building Codes Board (ABCB) Handbook: Durability in Buildings Including Plumbing Installations: 2015; and Australian Standard 4100:(R2016) - Steel Structures.
4. **Do these regulations adequately address the problem?**
   The regulations represent a minimalist approach to corrosion control. As such, they can leave specifiers, certifiers, building contractors and owners unprotected when things go wrong.
5. **Given this regulatory blind spot, how can the various stakeholders ensure corrosion is minimised?**
   They need to go beyond the legislation and implement corrosion management strategies that include design and specification reviews and regular inspection of corrosion and corrosion protection systems. Private certification schemes are also worthwhile.
   Note: Table 3.4.4.2 (NCC) Protective Coatings for Steelwork – provides allowance for specialist advise to be sought where the environment is beyond the scope of the document.
6. **What are the potential benefits of going beyond the regulations and following best practice in this area?**
   The cost of remedial work can be cut by 15-30% and, perhaps more importantly in the context of the climate emergency, buildings can be made corrosion-free for 15-50 years – allowing environmental benefits (embodied carbon reductions, etc.) to follow.

AACA Competency Codes: Design: Project Briefing 1.4 | Design: Pre Design 2.1 | Conceptual Design 3.3, 3.4, 3.7 | Schematic Design 4.2, 4.6 | Documentation: Detailed Design 5.3, 5.5 | Documentation: Documentation 6.2