Session: Rammed earth in the modern world  
Keynote speaker: Stephen Dobson, Ramtec (WA)

Stephen Dobson graduated in engineering from the University of Western Australia, became interested in building, and later built his first rammed earth home in Darwin in 1976. Ramtec was then formed as Australia’s first rammed earth building company in Perth in 1979. Ramtec rammed earth has been used all over Australia to build over 750 structures ranging from simple entry statements to public buildings, including the St Thomas Moore Cathedral in Margaret River, built in 1981, then the biggest modern rammed earth building in Australia. To this day, the Ramtec formwork system and batching/mixing/delivery method is the basis of all rammed earth construction in Australia. Stephen retains a passion for innovation and research in the field of rammed earth. He has witnessed the growth of modern rammed earth from inception to Australia now leading the world in cost effective construction.

Session: Innovations for the future  
Keynote speaker: David Easton, Rammed Earth Works (USA)

David Easton is the founder of Rammed Earth Works. David’s fascination with earth building began in early childhood, inspired by the thick adobe walls of the California missions. In 1968, Stanford created its School of Product Design where David and a handful of other eager inventors honed their skills at thinking outside the box. Against all odds, he launched a forty-year career of single-minded focus on solving the engineering challenges that had kept earth in the backwater of construction technologies. He started by developing engineering specifications and quality control procedures for building traditional rammed earth, then innovated a method for using high-pressure air to impact earth against an open formwork, and now is developing a low carbon high strength compressed earth block. David has authored the definitive text on rammed earth, run workshops on five continents, lectured worldwide, and consulted on over 300 projects.

Session: Thermal advantages of rammed earth  
Speaker: Peter Hickson, Earth Building Solutions (NSW)

Peter Hickson is a Master Builder with 32 years experience specialising in designing and constructing buildings of raw unfired earth. He has worked with UTS, Sydney and University of Adelaide in thermal research and UTS in earthquake testing. He is currently managing director of Earth Building Solutions, which offers services in building, training and consultancy and was a founding member of the Earth Building Association of Australia, EBAA and has served on the EBAA committee for many years including two years as Vice President and seven years as President.

Session: Rammed earth optimal thermal design  
Speaker: Luke Mahony, Earth Dwellings Australia (NSW)

Luke Mahony has been a rammed earth contractor on the East Coast of Australia for 10 years. He soon realised the importance of solar passive design, which lead to him becoming a thermal performance assessor to better understand the thermal behaviour of rammed earth. He works alongside UWA and the WA Dept. of Housing, has started work with The University of Newcastle investigating energy efficient designs and is also working with Indigenous organisations, trying to introduce energy efficient Rammed Earth housing to remote areas.

Session: Rammed earth thermal performance  
Speaker: Dong Chen, CSIRO (Vic)

Dong Chen graduated with thermal engineering and physical chemistry degrees from Tsinghua University, Beijing in 1987. After his PhD research in the Department of Chemical and Materials Engineering, Auckland University, he joined CSIRO in 1999. Dong’s research interests are in the physical and numerical modelling in building thermal performance, climate change impact and adaptation, air conditioning and ventilation. He is currently leading the further development of AccuRate, the benchmark house energy rating tool used in Australia.
Session: Rammed earth structural design  
Speaker: Bill Smalley, Scott Smalley Partnership (WA) 

Bill Smalley studied civil engineering at Perth Technical College, which later became WA Institute of Technology, and graduated from there with an Associateship in Civil Engineering in 1968. He worked in a consulting practice as a structural and civil engineering draughtsman while studying and following graduation, as a structural engineer. He began in independent practice in 1981. He is presently the principal of Scott Smalley Partnership, consulting in the area of structural engineering design, including the use of stabilized rammed earth.

Session: Rammed earth heritage and conservation  
Speaker: Paul Jaquin, LDE Consulting (NZ) 

Paul Jaquin is a Structural Engineer and works in Warkworth, New Zealand. Paul was chairman of Earth Building UK and is a visiting research fellow at the University of Bath. His research looked at the fundamental behaviour of earth buildings and the mechanisms of deterioration of historic rammed earth buildings. Paul has authored a number of books about rammed earth construction, and has designed new rammed earth buildings in the UK.

Session: Rammed earth testing standardisation  
Speaker: Chris Beckett, University of Western Australia 

Chris Beckett joined the University of Western Australia in 2012, after completing his Masters in Civil Engineering and PhD in rammed earth construction at Durham University (UK). His work focuses on the development of rammed earth material properties during the construction process and how they can be controlled to suit specific applications. He has published several papers covering many aspects of rammed earth’s behaviour and is heavily involved in the development of a new set of Standards for rammed earth construction.

**ICREC 2015 WORKSHOP PROGRAMME**

**Wednesday 11 February**

09:00-10:00  
Session 6  
Rammed earth testing standardisation  
Chris Beckett, UWA

10:30-11:15  
Rammed earth structural design  
Bill Smalley, Scott Smalley Partnership

11:15-12:00  
Thermal advantages of rammed earth  
Peter Hickson, Earth Building Solutions

12:00-12:15  
Thank you and close

**Tuesday 10 February**

08:15-09:00  
Registration

09:00-09:15  
Welcome

09:15-10:15  
Rammed earth in the modern world  
Stephen Dobson, Ramtec

10:15-10:45  
Morning tea

10:45-11:30  
Rammed earth heritage and conservation  
Paul Jaquin, LDE Consulting

11:30-12:15  
Rammed earth optimal thermal design  
Luke Mahony, Earth Dwellings Australia

12:15-13:00  
Lunch

13:30-14:15  
Rammed earth thermal performance  
Dong Chen, CSIRO

14:15-15:00  
Afternoon tea

15:00-15:30  
General discussion forum

**Faculty of Engineering, Computing and Mathematics**

The University of Western Australia