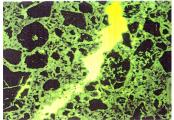
SETSCO TRAINING CENTRE

WORKSHOP: STRUCTURAL & NON-STRUCTURAL CRACKS: ISSUES & SOLUTIONS



Plastic shrinkage crack as seen under the microscope

Date: 27 April 2007 (Friday) Time: 0900 hrs to 1700 hrs

Venue: INFORMATICS Professional Development Centre 10-12 Science Park Road, Blk A, S609079

Fees per person: S\$140 + GST

(Fee is inclusive of lunch, tea / coffee, snacks and course material) Accredited Under SIA-BOA Program – 4 CPD Points Accreditation by Professional Engineers Board (PEB) – Under Review

SUITABLE FOR

The workshop is highly suitable for Architects, Building Contractors, Consultants, Concrete Producers, Construction Chemical Suppliers, Engineers, Designers, Managers, Owners, Pre-Cast Concrete Producers, QA /QC Personnel & Quantity Surveyors. Most of the participants will find the workshop to be a time saving means to broaden & update their knowledge on structural & nonstructural cracks.

ABOUT THE ORGANISER

SETSCO is one of Singapore's largest testing & inspection companies accredited by the Singapore Accreditation Council (SAC). It offers a comprehensive range of testing, calibration, inspection, consultancy & training services to a wide spectrum of industries.

Contact Us:

Singapore (HQ) - SETSCO Services Pte Ltd 18 Teban Gardens Crescent - Singapore 608925 ☎T (65) 6566 7777 ⓑF (65) 6566 7718

Malaysia Office - SETSCO Services (M) Sdn Bhd

28 Jalan Anggerik Vanilla W31/W • Kota Kemuning, Seksyen 31 • 40460 Shah Alam, Selangor Darul Ehsan • Malaysia ■ T (603) 5121 1928 ■ F (603) 5121 3928

Vietnam Representation Office - Cong Ty SETSCO Services Pte Ltd

Suit #9, 4th floor • Saigon Business Centre • 65 Le Loi, District 1 • Ho Chi Minh City, Vietnam T (84) 8 8270 241 BF (84) 8 8225 454

WORKSHOP PROGRAM

| 0900 - 0930 hrs | Registration & Collection of Course Material. | | |
|-----------------|---|--|--|
| 0930 - 1045 hrs | Presentation 1 Structural Cracks in Concrete Structures - By Er Dr Niall MacAlevey, Consultant, Singapore. | | |
| 1045 - 1130 hrs | Tea / Coffee Break | | |
| 1130 - 1230 hrs | Presentation 2 Cracks Due to Shrinkage & Settlement of Concrete: Issues & Solutions - By Dr Jong Herman Cahyadi, Nanyang Technological University (NTU), Singapore | | |
| 1230 - 1330 hrs | Lunch Break | | |
| 1330 - 1445 hrs | Presentation 3 Early Thermal Cracking in Concrete: Issues & Solutions - Er Dr Tam Chat Tim, National University of Singapore (NUS), Singapore. | | |
| 1445 - 1515 hrs | Tea / Coffee Break | | |
| 1515 - 1630 hrs | Presentation 4 Crack Evaluation Methods & Crack Repair Techniques - By Dr Arvind Suryavanshi, Setsco Services Pte Ltd, Singapore | | |
| 1630 - 1700 hrs | A Video Show | | |

COURSE BACKGROUND

Cracks in concrete structures appear due to numerous reasons. They may affect appearance only, or they may indicate significant structural distress or lack of durability. Their significance depends on the type of structure, as well as the nature of cracking. This workshop focuses on the causes, implications & remedial methods to control various types of structural & non-structural cracks in field concrete structures. The related theory is also covered in brief. The workshop attempts to educate engineers, architects & designers in identifying the best available solution to cracking problems.



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How You Will Benefit?

- Acquire skills from experts in the field to become a successful problem solver.
- See how poor construction practices lead to defects such as cracks.
- Discover practical solutions to avoid cracks.
- Understand how to repair cracks effectively.
- Take home course material full of useful information that helps in solving future troubleshooting.

What You Will Cover?

- Structural cracks.
- Cracks due to shrinkage, settlement & thermal effects in concrete.
- Cracks & crack repair methods.
- Actual case studies as experienced on site.
- Video show

SPEAKERS PROFILES

Er Dr Niall MacAlevey: Dr Niall is currently an independent consultant specialising in the analysis & design of reinforced & prestressed concrete structures, forensic engineering & the strengthening of concrete structures. He is the founder of the firm "Shamrock Consultants", is a member of the Institution of Engineers of Ireland & is a registered Professional Engineer in Singapore. He graduated from University College Dublin, Ireland, in 1987 & completed his M.Sc. degree in "Concrete Structures" at Imperial College, London. He completed his PhD degree at the Nanyang Technological University in 1997 on "The Strengthening of Concrete Structures" & later joined the academic staff there. His main research interest there was in the strengthening of concrete structures using carbon fibre. He has worked for a number of consulting engineering firms and specialist prestressing subcontractors in London, Cambridge, Hong Kong & Singapore.

Dr Jong Herman Cahyadi: Dr Herman received his PhD degree from the University of Tokyo, Japan, in 1995.

He is currently working as an Assistant Professor in the School of Civil & Environmental Engineering, NTU. His research interests include durability of concrete, micro-structure of concrete, hydration models for cement-based materials, computerised concrete mix design, non-destructive tests on concrete, & application of waste materials in concrete. So far he has published 19 technical papers in international journals & conference proceedings. He was awarded the Yoshida Award in 1994, & Monbusho Scholarship from 1990-1995.

Er Dr Tam Chat Tim: Dr Tam holds PhD degree in Materials Science from University of Calgary, Alberta, Canada, & MEng in Structures from University of Adelaide, South Australia. He is a registered Professional Engineer & Fellow of many national & international professional bodies. He has been involved in drafting of many of the Singapore Standards for concrete making materials & testing of concrete. He has worked in the industry before engaging in teaching, research & consultancy activities for over 40 years in the field of concrete materials & construction, in particular, tropical weather concreting & introduced the concept of sandwich layered casting method with the use of low heat blended cement in many projects in the region. He has published widely in the field of concrete materials & construction. He has been involved in drafting of many of the Singapore Standards for concrete making materials & testing of concrete & a member of standards council & first deputy chairman of the Building & Construction Standards Committee.

Dr Arvind Suryavanshi: Dr Arvind received his PhD degree from University of Manchester Institute of Science and Technology (UMIST), England. He has been involved in research, teaching and consultancy for over ten years. His research interests relate to construction materials & construction technology with special emphasis on concrete materials & their performance in real environment. He has published 24 refereed technical papers in International Journals and Conferences. He is the recipient of Commonwealth Fellowship awarded by the Association of Commonwealth Universities, UK. His current interests include education & training of engineers in the field of construction materials & construction technology

REGISTRATION FORM- STRUCTURAL & NON-STRUCTURAL CRACKS: ISSUES & SOLUTIONS – 27 APRIL 2007

Please fill-in the registration form & fax to 6566 7718 or e-mail to wonglk@setsco.com before 27 April 2007. Cheques should be made payable to "SETSCO Services Pte Ltd". Please forward the cheque along with a copy of the filled-in registration form to SETSCO Services Pte Ltd, 18 Teban Gardens Crescent, Singapore 608925 (Attention to Miss Wong Li Kien). *Delete as appropriate

| Name 1 (Dr/Mr/Ms) | : | SIA*/PEB reg. no* | : |
|-------------------|---|-------------------|---|
| Name 2 (Dr/Mr/Ms) | : | SIA*/PEB reg. no* | : |
| Name 3 (Dr/Mr/Ms) | : | SIA*/PEB reg. no* | : |
| Company name | : | Contact person | : |
| Company address | : | Tel/ Fax | : |
| | | E-mail | : |

For more information, please contact: Wong Li Kien @ 6895 0626, e-mail: wonglk@setsco.com or Dr. Arvind @ 6895 0633, e-mail: arvind@setsco.com In-house training: SETSCO is able to customise similar course (s) to fit to your needs. For more details, please contact the above.

Note: SETSCO Services Pte Ltd reserves the right to cancel the workshop or amend the schedule, venue & speaker due to circumstances beyond its control. Registration is on first-come-first-serve basis. We regret that we cannot refund the registration fees, however replacement is accepted.