



ONE DAY COURSE ON Structural Steel Design Bridging the Design Codes British Code 5950 and Eurocode 3

Mantanani Hall (2nd Floor)

Tang Dynasty Hotel Kota Kinabalu, Sabah

16th August 2017 (Wednesday)



INTRODUCTION

Eurocode 3, published by the European standardization committee (CEN). Although Eurocode 3 (EC3) is similar to BS5950, EC3 is more comprehensive and better developed as compared with BS5950. The major difference is the general absence of tables of values computed from the basic design equations that might be used to facilitate manual design. Therefore, understanding the complicated equations and concepts in EC3 is the crucial part to switch over to EC3 for steel design. Furthermore, basic design principles, connections, column bases design and detailing will be covered with worked examples.

This course is aimed at civil and structural engineers seeking an understanding of the general rules, main features and changes contained in Eurocode 3 Part 1-1: General rules and rules for buildings. The course will cover design of structural components, structural loading, material properties, design at the ultimate and serviceability limit states. Verification for member resistance using hand calculation procedures and tabulated design data will be explained. Worked examples with direct reference to the clauses in Eurocodes EC3 will be used to illustrate the application of the code requirements.



SPEAKER



Dr. Fathoni Usman is a senior lecturer in Civil Engineering Department, College of Engineering, Universiti Tenaga Nasional (UNITEN). He obtained his Ph.D. and Master's degrees in Civil Engineering (Structure and Materials) from Universiti Teknologi Malaysia (UTM), Malaysia. He joined UNITEN in 2010 where he lectured in courses on structural steel design, conducted research, provided short courses and consultancy services to the industry especially in the field of structural assessment and monitoring. His research area is on structural health monitoring, value engineering advisory system and natural hazard monitoring and early warning system development. He is member of Centre for Forensic Engineering UNITEN, member of MyFEIG under MySET and also as academic committee member of MSSA.



REGISTRATION FORM

NAME: _____
POSITION: _____
ORGANISATION: _____

FULL ADDRESS : _____

PHONE: _____(O)
_____ (hp)

EMAIL: _____

GROUP REGISTRATION (if applicable)

NAME: PROF. / ASS. PROF./ DR. / IR. / MR. / MRS.
POSITION

1) _____
2) _____
3) _____

PAYMENT

Enclose a crossed cheque
No: _____ for
RM _____ issued in favour of
MALAYSIAN STRUCTURAL STEEL ASSOCIATION
and crossed 'A/C payee only'
*(Please add 50 cents for outstation check and write
your name(s) & company, Phone/ Fax number at the
back of the cheque. Payment can also be banked in
to Affin Islamic Bank Bhd; Account Number:
105980018813*

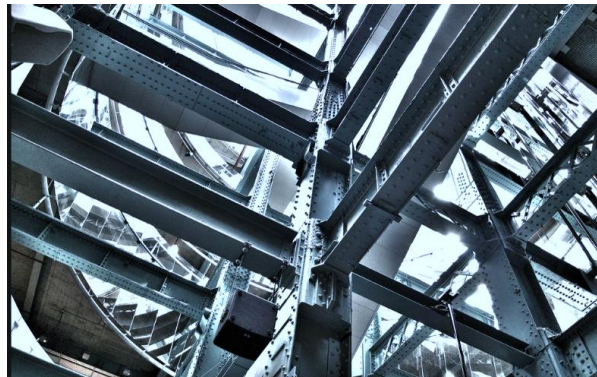
SIGNATURE: _____

DATE: _____

All completed form/s should reach the MSSA
Secretariat address not later than 9th August 2017.
e-mail to:
corporate@mssa.org.my

PROGRAMME

- Introduction: overall view of Eurocode EC3; key differences between EC3 and BS5950; terminology and conventions; design load combinations and their comparison with BS5950; mechanical properties of steel; partial factors for limit state design; nominal yield strength of steel. Local buckling and section classification and how to avoid local buckling.
- Beams: shear resistance; shear area, moment resistance, effect of high shear, serviceability deflections; example; Lateral torsional buckling (LTB); how to avoid LTB; design of lateral restraints; buckling resistance of rolled and welded beams; unbraced length; moment gradient effect; beam with intermediate lateral restraints; cantilever beam; examples.
- Beam-column: Cross section capacity checks; buckling capacity examples.
- Compression member: Factors affecting column buckling; elastic critical load and buckling length; selection of buckling curves and imperfections; design procedure; checks; interaction factors.
- Simple frames: columns in simple construction; nominal moments due to eccentricity of loads; column moments; simplified buckling check.



PROGRAMME DETAILS

Date: 16th August 2017 (Wednesday)

Duration: 1 Day

Time: 9.00am – 6.00pm

Venue: Tang Dynasty Hotel Kota
Kinabalu

Fees: RM 650.00 – MSSA Member
RM 750.00 – Non member

* Fees inclusive of, course materials, light refreshment and lunch.

* Certificate of Attendance will be issued to participants with at least 75% attendance.



For further information and registration please contact MSSA Secretariat (Aliff Imran) at 603-7734 3737 / 603 7734 3377 or email to corporate@mssa.org.my / rescen.mssa@gmail.com

MALAYSIAN STRUCTURAL STEEL ASSOCIATION
Oasis Square, C-11-3A, Block C.
No. 2, Jalan PJU 1A/7A,
Ara Damansara, PJU 1A,
47301 Petaling Jaya, Selangor Darul Ehsan,
Malaysia
Tel : +603-7734 3737 / 7734 3377
Website: www.mssa.org.my