EN 1990: Eurocode: Basis of Structural Design
The Head Eurocode
An Innovative Structural Safety Code Of Practice

Introduction to EN 1990

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EN 1990 – Eurocode: Basis of Structural Design

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Objectives of EN 1990: Basis of Structural Design

EN 1990 establishes principles and requirements for the
• Safety
• Serviceability
• Durability
of structures; and describes
• The basis for their design and verification, and
• Gives guidelines for related aspects of structural reliability
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Linking of the Eurocodes

EN 1990

Structural safety, serviceability and durability

EN 1991

Actions on structures


Design and detailing

Geotechnical and Seismic design

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EN 1990 is the Head Eurocode
For the design of buildings and civil engineering works every Eurocode part from, EN 1991: Eurocode 1: Actions on Structures, and The design Eurocodes EN 1992 to EN 1999 has to be used together with EN 1990

EN 1990 provides the material independent and safety related information required for the design of buildings, and civil engineering works for the Eurocodes suite.
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Intended Users of EN 1990

EN 1990 is intended for use by
• Committees drafting Standards for Structural Design and related products, testing and execution Standards
• Clients (e.g. for the formulation of the specific requirements on reliability levels and durability)
• Designers and Constructors
• Relevant Competent Authorities
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EN 1990: Contents

Foreword
Section 1 : General
Section 2 : Requirements
Section 3 : Principles of limit states
Section 4 : Basic variables
Section 5 : Structural analysis and design assisted by testing
Section 6 : Verification by the partial factor method

Annex A(n):(N): Application for buildings (1): bridges (2)
Annex B (I) : Management of structural reliability for construction works
Annex C (I) : Basis for partial factor design and reliability analysis
Annex D (I) : Design assisted by testing

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Thank you for your attention