# INTERNATIONAL STANDARD

ISO 22111

First edition 2007-11-15

## Bases for design of structures — General requirements

Bases du calcul des constructions — Exigences générales



#### PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.



#### **COPYRIGHT PROTECTED DOCUMENT**

#### © ISO 2007

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Page

### Contents

Forewo	ord	iv
Introdu	ıction	v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Symbols	
- 5	Application	
6	Basic requirements for structural performance	
7	Classification of structures and elements of structures	
8 8.1	ActionsGeneral	
8.2	Evaluation of values of actions	
8.3	Permanent actions	
8.4 8.5	Variable actions	
9 9.1	Combinations of actionsGeneral	
9.1 9.2	Ultimate limit states	
9.2.1	Strength	
9.2.2	Static equilibrium	
9.3	Serviceability limit states  Formats for presentation of design values for leading and accompanying actions	
9.4		
10	Analysis and testing	
10.1 10.2	Analysis Testing	
-	Demonstrating compliance with requirements	
11 11.1	GeneralGeneral	
11.2	Ultimate limit state	
11.2.1	Strength	
11.2.2	Static equilibrium	
11.3 11.4	Robustness	
11. <del>4</del> 11.5	Durability	
	A (informative) Guidance for adopting groups	
	B (informative) Formats for presentation of design values for use in combinations of	
Annex	actions	17
Annex	C (informative) Calibration of design values	
	D (informative) Design procedure	
	ranhv	23
minilion	HALIIIV	<i>'</i> :