

DIN EN 1991-1-1:2010-12 (E)

Eurocode 1: Actions on structures – Part 1-1: General actions – Densities, self-weight, imposed loads for buildings (includes Corrigendum AC:2009) English translation of DIN EN 1991-1-1:2010-12

CONTENTS

	Page
FOREWORD TO EN 1991-1-1:2002 + AC:2009.....	4
BACKGROUND OF THE EUROCODE PROGRAMME	4
STATUS AND FIELD OF APPLICATION OF EUROCODES	5
NATIONAL STANDARDS IMPLEMENTING EUROCODES.....	6
LINKS BETWEEN EUROCODES AND HARMONISED TECHNICAL SPECIFICATIONS (ENs AND ETAs) FOR PRODUCTS	6
ADDITIONAL INFORMATION SPECIFIC FOR EN 1991-1-1	6
NATIONAL ANNEX FOR EN 1991-1-1	7
SECTION 1 GENERAL	8
1.1 SCOPE	8
1.2 NORMATIVE REFERENCES.....	9
1.3 DISTINCTION BETWEEN PRINCIPLES AND APPLICATION RULES.....	9
1.4 TERMS AND DEFINITIONS.....	10
1.5 SYMBOLS	11
SECTION 2 CLASSIFICATION OF ACTIONS	12
2.1 SELF-WEIGHT	12
2.2 IMPOSED LOADS	12
SECTION 3 DESIGN SITUATIONS	14
3.1 GENERAL	14
3.2 PERMANENT LOADS	14
3.3 IMPOSED LOADS	14
3.3.1 General.....	14
3.3.2 Additional provisions for buildings.....	15
SECTION 4 DENSITIES OF CONSTRUCTION AND STORED MATERIALS	16
4.1 GENERAL	16
SECTION 5 SELF-WEIGHT OF CONSTRUCTION WORKS.....	17
5.1 REPRESENTATION OF ACTIONS	17
5.2 CHARACTERISTIC VALUES OF SELF-WEIGHT	17
5.2.1 General.....	17
5.2.2 Additional provisions for buildings.....	17
5.2.3 Additional provisions specific for bridges.....	18
SECTION 6 IMPOSED LOADS ON BUILDINGS	19
6.1 REPRESENTATION OF ACTIONS	19
6.2 LOAD ARRANGEMENTS.....	19
6.2.1 Floors, beams and roofs.....	19
6.2.2 Columns and walls.....	19
6.3 CHARACTERISTIC VALUES OF IMPOSED LOADS	20
6.3.1 Residential, social, commercial and administration areas	20
6.3.1.1 Categories.....	20
6.3.1.2 Values of actions	21
6.3.2 Areas for storage and industrial activities	24
6.3.2.1 Categories.....	24
6.3.2.2 Values for Actions.....	24
6.3.2.3 Actions induced by forklifts	25
6.3.2.4 Actions induced by transport vehicles.....	26

6.3.2.5 Actions induced by special devices for maintenance.....	27
<i>6.3.3 Garages and vehicle traffic areas (excluding bridges)</i>	<i>27</i>
6.3.3.1 Categories.....	27
6.3.3.2 Values of actions	27
<i>6.3.4 Roofs</i>	<i>28</i>
6.3.4.1 Categories.....	28
6.3.4.2 Values of actions	29
6.4 HORIZONTAL LOADS ON PARAPETS AND PARTITION WALLS ACTING AS BARRIERS.....	30
LOADED AREAS	31
ANNEX A (INFORMATIVE) TABLES FOR NOMINAL DENSITY OF CONSTRUCTION MATERIALS, AND NOMINAL DENSITY AND ANGLES OF REPOSE FOR STORED MATERIALS.....	32
ANNEX B (INFORMATIVE) VEHICLE BARRIERS AND PARAPETS FOR CAR PARKS	43
BIBLIOGRAPHY.....	44