

# DIN EN 14081-1:2016-06 (E)

## Timber structures - Strength graded structural timber with rectangular cross section - Part 1: General requirements

---

<b>Contents</b>		<b>Page</b>
European foreword .....		4
Introduction .....		5
1	Scope .....	6
2	Normative references .....	6
3	Terms and definitions .....	7
4	Symbols .....	8
5	Requirements for structural timber .....	9
5.1	Mechanical resistance .....	9
5.1.1	General .....	9
5.1.2	Visual strength grading .....	9
5.1.3	Machine strength grading .....	9
5.2	Fire resistance (charring rate) .....	11
5.3	Reaction to fire .....	11
5.4	Release of dangerous substances .....	12
5.5	Biological durability .....	12
5.5.1	Structural timber without preservative treatment .....	12
5.5.2	Structural timber with preservative treatment .....	13
5.6	Geometrical data .....	13
6	Assessment and verification of constancy of performance -AVCP .....	13
6.1	General .....	13
6.2	Type testing .....	13
6.2.1	General .....	13
6.2.2	Test samples, testing and compliance criteria .....	14
6.2.3	Test reports .....	15
6.2.4	Shared other party results .....	15
6.3	Factory production control (FPC) .....	15
6.3.1	General .....	15
6.3.2	Requirements .....	16
6.3.3	Product specific requirements .....	19
6.3.4	Initial inspection of factory and of FPC .....	20
6.3.5	Continuous surveillance of FPC .....	20
6.3.6	Procedure for modifications .....	21
7	Marking .....	21
7.1	Marking methods .....	21
7.2	Information on the timber (method A) or on the package (method B) .....	21
7.3	Information in the documents accompanying strength graded structural timber .....	22
8	Environmental issues .....	23
Annex A (normative) Requirements for strength reducing characteristics for visual grading standards .....		24
A.1	Limitations for strength-reducing characteristics .....	24

A.1.1	Knots .....	24
A.1.2	Slope of grain .....	24
A.1.3	Density and rate of growth .....	24
A.1.4	Fissures .....	25
A.2	Limitations for geometrical characteristics .....	25
A.2.1	Wane .....	25
A.2.2	Warp .....	25
A.3	Limitations for biological characteristics .....	26
A.4	Other characteristics .....	26
A.4.1	Reaction wood .....	26
A.4.2	Other criteria .....	26
<b>Annex B (normative) Marking codes for species .....</b>		<b>27</b>
B.1	Marking codes for single species .....	27
B.2	Marking codes for species combination .....	28
<b>Annex C (normative) Measurement of moisture content .....</b>		<b>30</b>
C.1	General .....	30
C.2	Measurement of moisture content of timber during production .....	30
<b>Annex ZA (informative) Clauses of this European Standard addressing the provisions of the EU Construction Products Regulation .....</b>		<b>31</b>
ZA.1	Scope and relevant characteristics .....	31
ZA.2	Procedure for Assessment and Verification of the Constancy of Performance (AVCP) of strength graded structural timber with rectangular cross section .....	33
ZA.2.1	System(s) of AVCP .....	33
ZA.2.2	Declaration of performance (DoP) .....	34
ZA.2.2.1	General .....	34
ZA.2.2.2	Content .....	35
ZA.2.2.3	Example of DoP .....	35
ZA.3	CE marking and labelling .....	36
ZA.3.1	General .....	36
ZA.3.2	CE marking .....	36
ZA.3.3	Marking on the product or on a label attached to the package .....	39
<b>Bibliography .....</b>		<b>41</b>