DIN EN 14081-1:2019-10 (E)

Timber structures - Strength graded structural timber with rectangular cross section - Part 1: General requirements (includes Amendment A1:2019)

Contents

Page

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 12
5.6 Geometrical data 12

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 13
6.2.3 Test reports 14
6.2.4 Shared other party results 15
6.3 Factory production control (FPC) 15
6.3.1 General 15
6.3.2 Requirements 15
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 20

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

Annex B (normative) Marking codes for species ... 27

B.1 Marking codes for single species ... 27
B.2 Marking codes for species combination ... 28

Annex C (normative) Measurement of moisture content ... 30

C.1 General ... 30
C.2 Measurement of moisture content of timber during production ... 30

Annex ZA (informative) Relationship of this European Standard with Regulation (EU) No.305/2011 . 31

ZA.1 Scope and relevant characteristics ... 31

ZA.2 System of Assessment and Verification of Constancy of Performance (AVCP) ... 33

ZA.3 Assignment of AVCP tasks ... 33

Bibliography ... 36