

Hardwood round timber — Qualitative classification

Part 3. Ash and maples and sycamore

The European Standard EN 1316-3 : 1997 has the status of a
British Standard

ICS 79.040

National foreword

This British Standard is the English language version of EN 1316-3 : 1997. No existing British Standard is superseded.

The UK participation in its preparation was entrusted by Technical Committee B/543, Round and sawn timber, to Subcommittee B/543/4, Round timber, which has the responsibility to:

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- present to the responsible European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
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Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled 'International Standards Correspondence Index', or by using the 'Find' facility of the BSI Standards Electronic Catalogue.

Additional information

In clause 2 the reference to prEN 1309 : 1994 should read 'prEN 1309-2 *Round and sawn timber — Method of measurement of dimensions — Part 2: Round timber*' and the footnote should read '1) Under preparation'. In 4.3 the references to prEN 1309 : 1994 should read 'prEN 1309-2'.

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Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 6, an inside back cover and a back cover.

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English version

Hardwood round timber — Qualitative classification Part 3: Ash and maples and sycamore

Bois ronds feuillus — Classement qualitatif —
Partie 3: Frêne et érables

Laub-Rundholz — Qualitäts-Sortierung —
Teil 3: Esche und Ahorn

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 175, Round and sawn timber, the Secretariat of which is held by AFNOR.

This standard is one of a series of standards concerning round timber (softwoods and hardwoods).

Other parts of this standard are:

- EN 1316-1 *Hardwood round timber — Qualitative classification — Part 1 : Oak and beech*
- EN 1316-2 *Hardwood round timber — Qualitative classification — Part 2 : Poplar*

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 1998, and conflicting national standards shall be withdrawn at the latest by April 1998.

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1 Scope

This standard specifies a qualitative classification and grade designations for felled trees of ash (*Fraxinus excelsior*) and maples presented in the form of long poles or logs.

The classifications describe quality classes of round timbers for which the intended use is not known.

The maples classification is applied for the following species: *Acer pseudoplatanus*, *Acer platanoides*, *Acer campestre*.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references subsequent amendments to or revisions of any of these publications apply to this European Standard, only when incorporated in it by amendment or revision. For undated references, the latest edition of the publication referred to applies.

EN 844-1	<i>Round and sawn timber — Terminology — Part 1: General terms common to round timber and sawn timber</i>
EN 844-2	<i>Round and sawn timber — Terminology — Part 2: General terms relating to round timber</i>
EN 844-8	<i>Round and sawn timber — Terminology — Part 8: Terms relating to features of round timber</i>
prEN 1309 : 1994	<i>Round and sawn timber — Method of measurement of dimensions¹⁾</i>
EN 1310	<i>Round and sawn timber — Method of measurement of features</i>
EN 1311	<i>Round and sawn timber — Method of measurement of biological degrade</i>

3 Definitions

For the purposes of this standard, the definitions in the standards EN 844-1, EN 844-2 and EN 844-8 apply.

4 Qualitative classification

4.1 Grading principles

Each long pole, log or portion of a round timber individualized by a theoretical cross-cut point, is qualified according to its dimensions and to the presence, size and distribution of specific characteristics.

4.2 Designation of grades

Standardized designation of classes includes three characters, the latest one separated by a dash:

- the first and second characters are the genus initial and first letter in Latin;
- the third character indicates the quality class.

4.2.1 Ash (*Fr*)

The classification of ash is divided into four quality classes:

- Fr-A is an exceptional quality class;
- Fr-B is a normal quality class;
- Fr-C is a less valuable quality class;
- Fr-D is a quality class which includes long pole, log or portion of long poles not permitted in the other quality classes.

For all characteristics in class Fr-D, more than 40 % of the volume of the wood shall be useable.

4.2.2 Maples (*Ac*)

The classification of maples is divided into four quality classes:

- Ac-A is an exceptional quality class;
- Ac-B is a normal quality class;
- Ac-C is a less valuable quality class;
- Ac-D is a quality class which includes long pole, log or portion of long pole not permitted in the other quality classes.

For all characteristics in class Ac-D, more than 40 % of the volume of the wood shall be useable.

4.3 Characteristics to be taken into account for the classification

Tables 1 and 2 give the characteristics taken into account and these shall be measured according to prEN 1309 : 1994, EN 1310 and EN 1311.

Limits of permitted characteristics of each class are given in tables 1 and 2.

A long pole, log or portion of round timber shall be downgraded by its failure to meet the requirement of any single characteristic.

Length and diameter shall be measured using the method stated in prEN 1309 : 1994¹⁾

¹⁾ prEN 1309 : 1994 has been divided into two Parts; Part 2, in preparation, will be applicable to round timber.

4.4 Tables of rules for grading

Table 1. Grading rules for ash				
Characteristics ¹⁾	Class			
	Fr-A	Fr-B	Fr-C	Fr-D
Minimum for dimensions				
Minimum length in m	3 ²⁾	3 ²⁾	2 ²⁾	Without limit
Minimum mid-diameter under bark in cm	40 ²⁾	35 ²⁾	20 ²⁾	Without limit
Uncovered sound knots	Not allowed	∑ max. ≤ 150 mm/3 m and diameter < 60 mm	∑ max. ≤ 150 mm/2 m	Allowed
Uncovered rot knots	Not allowed	Not allowed	∑ max. ≤ 80 mm/2 m	Allowed
Covered knots (buckles)	Not allowed	Not allowed	Max. 1 buckle/2 m	Allowed
Eccentricity of heart in %	≤ 10	≤ 20	Allowed	Allowed
Simple sweep in cm/m	≤ 3	≤ 4	Allowed	Allowed
Simple heart shakes	Allowed in the central 1/3 of the diameter	Allowed in the central 1/2 of the diameter	Allowed	Allowed
Star shakes	Not allowed	Allowed in the central 1/5 of the diameter	Allowed in the central 1/3 of the diameter	Allowed
Checks	Not allowed	Not allowed	Allowed	Allowed
Bore holes	Not allowed	Not allowed	Not allowed	Allowed
Rots	Not allowed	Not allowed	Not allowed	Allowed
Canker	Not allowed	Not allowed ²⁾	Allowed	Allowed
Brown heart	≤ 20% of cross section diameter ³⁾	≤ 30% of cross section diameter ⁴⁾	Allowed	Allowed

¹⁾ The limits for the following characteristics shall be fixed by contract: ovality, spiral grain, roses, epicormic shoots, cracks.
²⁾ Except clauses stipulated by contract.
³⁾ A sub-class 'Fr-A Brown heart' allows 100 % of brown heart.
⁴⁾ A sub-class 'Fr-B Brown heart' allows 100 % of brown heart.

Table 2. Grading rules for maples				
Characteristics¹⁾	Class			
	Ac-A	Ac-B	Ac-C	Ac-D
Minimum for dimensions				
Minimum length in m	3 ¹⁾	3 ¹⁾	2 ¹⁾	Without limit
Minimum mid-diameter under bark in cm	35 ¹⁾	30 ¹⁾	20 ¹⁾	Without limit
Uncovered sound knots	∑ max. ≤ 150 mm/3 m	∑ max. ≤ 150 mm/3 m and diameter < 60 mm	∑ max. ≤ 150 mm/2 m	Allowed
Uncovered rot knots	Not allowed	Not allowed	∑ max. ≤ 80 mm/2 m	Allowed
Covered knots (buckles)	Not allowed	Not allowed	1 buckle max. allowed on 2 m	Allowed
Eccentricity of heart in %	≤ 10	≤ 20	Allowed	Allowed
Simple sweep in cm/m	≤ 3	≤ 4	Allowed	Allowed
Simple heart shakes	Allowed in the central 1/3 of the diameter	Allowed in the central 1/2 of the diameter	Allowed	Allowed
Star shake	Not allowed	Allowed in the central 1/5 of the diameter	Allowed in the central 1/3 of the diameter	Allowed
Rots	Not allowed	Not allowed	Not allowed	Allowed
Brown heart	Not allowed	Not allowed	Allowed in the central 1/3 of diameter	Allowed

¹⁾ Except clauses stipulated by contract.

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