SLOVENSKI STANDARD
SIST EN 314-2:1996

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Vezane plošče - Kakovost zlepljenosti - 2. del: Zahteve

Plywood - Bonding quality - Part 2: Requirements

Sperrholz - Qualität der Verklebung - Teil 2: Anforderungen

Contreplaqué - Qualité du collage - Partie 2: Exigences

Ta slovenski standard je istoveten z: **EN 314-2:1993**

ICS:

79.060.10 Vezan les Plywood

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English version

Plywood - Bonding quality - Part 2 : Requirements

Contreplaqué - Qualité du collage - Partie 2 : Exigences

Sperrholz - Qualität der Verklebung - Teil 2 : Anforderungen

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CEN

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

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Contents list

Foreword

This European Standard was prepared by Working Group 2 "Plywood" (Secretariat: France) of Technical Committee CEN/TC 112, Wood-based panels (Secretariat: Germany).

This standard is one of a series of standards specifying requirements and test methods for plywood.

No existing European Standard is superseded.

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of an identical text or by endorsement, at the latest by August 1993, and conflicting national standards shall be withdrawn at the latest by December 1994.

In accordance with the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom.

1 Scope

This European Standard specifies requirements for bonding classes of veneer plywood according to their end uses.

The appropriate test methods are specified in EN 314-1.

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 636-1 Plywood
- Specifications
Part 1: Requirements for plywood for use in dry conditions [1])

EN 636-2 Plywood
Specifications
Part 2: Requirements for plywood for use in humid conditions [1])

EN 636-3 Plywood
Specifications
Part 3: Requirements for plywood for use in exterior conditions [1])

EN 314-1 Plywood
Bonding quality
Part 1: Test methods

3 Bonding classes

Bonding quality is divided into three classes, according to EN 636-1, EN 636-2 and EN 636-3, based upon moisture resistance as follows:

- Class 1: dry conditions

This bonding class is appropriate for normal interior climate.

- Class 2: humid conditions

This bonding class is appropriate for protected external applications (e. g. behind cladding or under roof coverings), but is capable of resisting weather exposure for short periods (e. g. when exposed during the construction). It is also suitable for interior situations where the service moisture condition is raised above the class 1 level.

- Class 3: exterior conditions

This bonding class is designed for exposure to weather over sustained periods.

NOTE: The durability of plywood depends not only upon the bonding performance level, but also upon other factors.

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1) At present at the draft stage

4 Requirements

For each pretreatment both the mean shear strength and the mean apparent cohesive wood failure for a minimum of 10 test pieces per glueline, shall satisfy the criteria given in table 2 for all three bonding classes.

The pretreatments are related to the bonding classes as given in table 1.

Each pretreatment is carried out on a separate set of ten pieces for each glueline.

Table 1: Pretreatments for the three bonding classes

	Pretreatments (according to EN 314-1)			
	5.1.1	5.1.2	5.1.3 *)	5.1.4
Class 1: dry interior	x			
Class 2: covered exterior	x	x		
Class 3: non covered exterior	x		x	x

*) When full phenolic glues are used, pretreatment 5.1.3 can be used provided pretreatment 5.1.4 is occasionnally used as a test of confirmation.

For all three bonding classes, each glueline shall satisfy two criteria: the mean shear strength and the mean apparent cohesive wood failure, as combined in the following table.

Table 2: Requirements

Mean shear strength f_v N/mm^2	Mean apparent cohesive wood failure w %
$0,2 \leq f_v < 0,4$	≥ 80
$0,4 \leq f_v < 0,6$	≥ 60
$0,6 \leq f_v < 1,0$	≥ 40
$1,0 \leq f_v$	no requirement

The relationship between the mean percentage of apparent cohesive wood failure and the mean shear strength given in table 2 is illustrated in figure 1

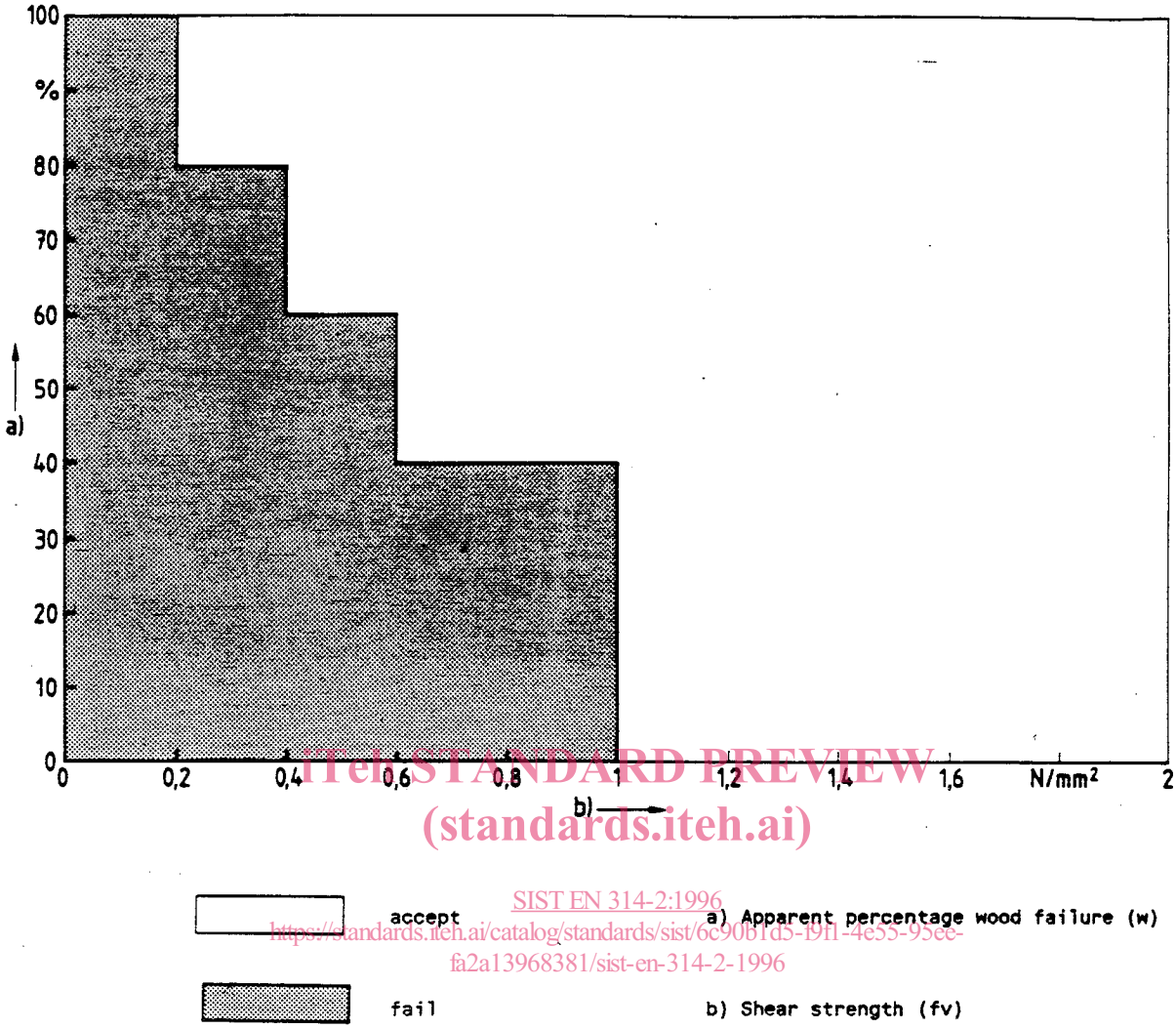

Figure 1: Relationship between the mean percentage of apparent cohesive wood failure and the mean shear strength

5 Determination of the bonding class

The comparison of results obtained according to EN 314-1 and requirements defined in this Standard, allows determination of the bonding class to which the tested panel belongs.

Annex A (informative)

Bibliography

EN 313-1 Plywood
Classification and Terminology
Part 1: Classification

EN 313-2 Plywood
Classification and Terminology
Part 2: Terminology