ISO/PRF 24322

ISO/TC 165/WG10/N 000

Date: 2023-10-19

ISO 24322:2023(E)

ISO/TC 165/WG 10

Secretariat: SCC

Date: 2023-xx

Timber structures — Methods of test for evaluation of long-term performance — Part 1: woodWood-based products in bending

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ISO 24322 was prepared by Technical Committee ISO/TC 165, *Structural ~~Timber~~timber*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at ~~www.iso.org/members.html~~www.iso.org/members.html.

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Introduction

This document sets out a framework to establish the duration of load and creep characteristics of timber structural products from test results on a sample drawn from a clearly defined reference population.

It is the intention that the document can be used on any structural product including but not limited to: sawn timber, glulam, structural composite lumber, I-beams, wood-based panels, poles and round timber. Whenever it is used, the document alerts the user to the basic requirements for the determination of consistent characteristic values. It permits the characterisation of duration of load and creep behaviour based on testing of commercial sized specimens.

Timber structures~~ -~~ — Methods of test for evaluation of long-term performance ~~–~~— Part 1: ~~wood~~Wood-based products in bending

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1 Scope

This document gives methods of determination of duration of load and creep factors under bending actions at ambient temperatures for a defined population of structural timber products such as solid timber, LVL, OSB, plywood, particleboard, I-beams calculated from test values.

It presents methods for

a) ~~a) determination of~~determining the duration of load and creep factors for new timber products,

b) ~~b)~~ establishing whether a previously defined set of duration of load and creep factors can be applied to a tested product, and

c) ~~c) An~~an optional method for establishment of sensitivity of duration of load and creep factors to changes in environmental conditions.

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NOTE 1~~:~~ This document is intended to apply to wood-based products for which a duration of load factor or a creep factor is used in design.

NOTE 2~~:~~ The effect of elevated temperature on the duration of load factor and creep factor that is derived using these methods for use with timber products ~~may~~can need additional consideration.

2 Normative references

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The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

~~<std>ISO 12122-1, *Structural timber — Determination of Characteristic values — Part 1: Basic principles*</std>~~

~~<std>ASTM D6815 *Standard specification for evaluation of duration of load and creep effects of wood and wood-based products*</std>~~

ISO 12122-1, *Structural timber — Determination of Characteristic values — Part 1: Basic principles*

3 Terms and definitions

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For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ~~—~~ISO Online browsing platform: available at ~~https://www.iso.org/obp~~https://www.iso.org/obp

— ~~—~~IEC Electropedia: available at ~~https://www.electropedia.org/~~https://www.electropedia.org/

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