BSI Standards Publication

Timber structures — Dowel-type fasteners — Requirements

National foreword

This British Standard is the UK implementation of EN 14592:2022. It supersedes BS EN 14592:2008+A1:2012, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee B/518, Structural timber.

A list of organizations represented on this committee can be obtained on request to its committee manager.

National Annex NA, Corrosion Resistance, provides additional informative guidance to assist users in determining the appropriate level of fastener corrosion protection necessary for their particular application, and can be found at the end of this document.

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Date	Text affected
31 May 2023	Addition of national annex with details in national foreword

EUROPEAN STANDARD **EN 14592**

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Supersedes EN 14592:2008+A1:2012

English Version

Timber structures - Dowel-type fasteners - Requirements

Structures en bois - Éléments de fixation de type tige - Exigences

Holzbauwerke - Stiftförmige Verbindungsmittel - Anforderungen

This European Standard was approved by CEN on 13 February 2020.

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European foreword

This document (EN 14592:2022) has been prepared by Technical Committee CEN/TC 124 “Timber structures”, the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by October 2022 and conflicting national standards shall be withdrawn at the latest by January 2024.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 14592:2008+A1:2012.

The main changes with respect to the previous edition are listed below:

— new concepts concerning dimensions and tolerances, e.g. target diameter;

— improved categories for corrosion protection;

— new specifications on wood density for testing of connections with dowel-type fasteners;

— low cycle ductility classes (seismic performance) and related test method;

— axial stiffness, static ductility and torsional ratio for screws.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This document specifies the characteristics of the following types of dowel-type fasteners:

— nails;

— staples;

— screws;

— dowels;

— bolts with nuts.

This document covers dowel-type fasteners for structural use in load bearing timber structures only. This document covers also the following additional intended uses of the screws:

— to fix roof or cladding elements to the timber structure, with or without insulation layers; and

— as reinforcement inserted in timber or in a glue laminated timber element to improve its resistance to compression perpendicular to the grain.

This document covers types of dowel-type fasteners, which are manufactured of either carbon steel or stainless steel and which may be coated for the following purposes:

— corrosion protection (as Type 1 coating);

— lubrication, to facilitate insertion (as Type 2 coating);

— withdrawal enhancement and/or collation for nails and staples (adhesive and/or resin coatings) (as Type 3 coating).

This document covers types of dowel-type fasteners, which are manufactured from materials and within the specifications for their geometry related properties, only as they are specified for:

— nails (see G.1);

— staples (see G.2);

— screws (see G.3);

— dowels (see G.4); and

— bolts with nuts (see G.5).

This document specifies also the assessment and verification of constancy of performance (AVCP) procedures of these characteristics and includes provisions for marking of dowel-type fasteners.

This document does not cover dowel-type fasteners treated with fire retardants to improve their fire performance, nor does it cover glued-in rods.