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**Timber structures — Glued laminated  
timber — Face and edge joint  
cleavage test**

*Structures en bois — Bois lamellé-collé — Essai de fendage des joints  
face à face et longitudinaux*

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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 165, *Timber structures*.

This second edition cancels and replaces the first edition (ISO 19993:2007), which has been technically revised.

The main changes compared to the previous edition are as follows.

- The acceptance criteria have been amended so that they are now contained in [Annex A](#) in keeping with the fact that this document deals only with a testing method.

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](http://www.iso.org/members.html).

## Introduction

This document was developed by TC 165 as a factory quality assurance test to be used for structural glulam and applied to the face and edge joints of each production batch. Advisory acceptance criteria are included in Annex A so that ISO 19993 is an independent document. The test is intended for use in establishing the effectiveness of inter-laminar face and edge bond in structural glued laminated timber of each production batch. It is not intended for use in initial type testing or to establish the effectiveness inter-laminar bond brought about by major changes of a production process such as change of adhesive, cramping pressures, adhesive curing or similar where cyclic delamination or block shear is preferred. There is nothing in principle that would prevent the test method from being applied to non-structural glulam.

Dry specimens are tested under ambient conditions and wet specimens are tested under ambient conditions after a vacuum-pressure soak under circumstances defined within the document.

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