



ISO 834-1

Fire-resistance tests — Elements of building construction —

**Part 1:
General requirements**

*Essai de résistance au feu — Éléments de construction —
Partie 1: Exigences générales*

**Second edition
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This document was prepared by Technical Committee ISO/TC 92, *Fire Safety*, Subcommittee SC 2, *FireResistance*.

This second edition cancels and replaces the first edition of ISO 834-1:1999 and the second edition of ISO/TR 834-3:2012, which have both been technically revised. It also incorporates the Amendment(s) ISO 834-1:1999/Amd 1:2012 and ISO 834-1:1999/Amd 2:2021.

The main changes are as follows:

- the content has been aligned with EN 1363-1: additional time-temperature curves have been added and changes have been made with respect to the criteria for load bearing capacity.

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The main changes made in this document with respect to ISO 834-1:1999/Amd2:2021 have been to align with EN 1363-1. In that respect, additional time-temperature curves have been added, and changes have been made to the criteria for load bearing capacity. ISO/TC 92/SC 2 appreciates that such criteria are in essence a contemporary compromise between state of the art science on structural behaviour in fire, and considerations reflecting the practical implication for use in fire laboratories, respecting the safety of staff and protecting the test equipment. EN 1363-1 was revised in 2019 (published officially in 2020), not directly based on scientific evidence but leaning more on practical considerations, with a view to judge different structures on a fair and equal basis, regardless of their failure mode in fire. Over the past couple of years, the revised EN 1363-1 has been used satisfactorily in Europe. Taking good notice of this, and after good discussion, ISO/TC 92/SC 2, decided to adopt the EN 1363-1:2020 changes.