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Standards

Irish Standard  
I.S. EN 14081-4:2009

# Timber structures - Strength graded structural timber with rectangular cross section - Part 4: Machine grading - Grading machine settings for machine controlled systems

## I.S. EN 14081-4:2009

*Incorporating amendments/corrigenda issued since publication:*

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English Version

**Timber structures - Strength graded structural timber with  
rectangular cross section - Part 4: Machine grading - Grading  
machine settings for machine controlled systems**

Structures en bois - Bois de structure de section  
rectangulaire classé selon la résistance - Partie 4:  
Classement par machine - Réglages pour les systèmes de  
contrôle par machine

Holzbauwerke - Nach Festigkeit sortiertes Bauholz für  
tragende Zwecke mit rechteckigem Querschnitt - Teil 4:  
Maschinelle Sortierung - Einstellungen von  
Sortiermaschinen für maschinenkontrollierte Systeme

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## **Foreword**

This document (EN 14081-4:2009) has been prepared by Technical Committee CEN/TC 124 “Timber structures”, the secretariat of which is held by SFS.

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of an identical text or by endorsement, at the latest by November 2009, and conflicting national standards shall be withdrawn at the latest by November 2009.

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

This document supersedes EN 14081-4:2005+A4:2008.

Other parts of this European Standard are

EN 14081-1, *Timber structures - Strength graded structural timber with rectangular cross section - Part 1: General requirements*

EN 14081-2, *Timber structures - Strength graded structural timber with rectangular cross section - Part 2: Machine Grading; additional requirements for initial type testing*

EN 14081-3, *Timber structures - Strength graded structural timber with rectangular cross section - Part 3: Machine Grading; additional requirements for factory production control*

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## 1 Scope

This European Standard gives settings, derived according to the requirements given in EN 14081-2, for various combinations of strength classes or grades, grading machines and species from particular sources of growth. These settings are only applicable to timber from the sources indicated in the tables.

## 2 Normative references

The following referenced documents are indispensable for the application 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.

EN 336, *Structural timber – Sizes, permitted deviations*

EN 14081-1:2005, *Timber structures - Strength graded structural timber with rectangular cross section - Part 1: General requirements*

EN 14081-2:2005, *Timber structures - Strength graded structural timber with rectangular cross section - Part 2: Machine Grading; additional requirements for initial type testing*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 14081-1:2005, EN 14081-2:2005 and the following apply.

### 3.1 Speed range

maximum and minimum throughput speeds appropriate to the critical speed for the derived settings (see 6.2.2 of EN 14081-2:2005).

## 4 Symbols

$a$	deflection (in mm)
$b$	width of timber cross section (in mm)
$E_{t,mean}$	characteristic mean tensile modulus of elasticity parallel to grain (in N/mm <sup>2</sup> )
$E_{0,mean}$	characteristic mean bending modulus of elasticity parallel to grain (in N/mm <sup>2</sup> )
$E_{dyn}$	value of dynamic modulus of elasticity (in N/mm <sup>2</sup> )
$E_{mod}$	model value of modulus of elasticity (units as stated)
$F$	force (units as stated)
$f_{t,k}$	characteristic tensile strength (in N/mm <sup>2</sup> )

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