

## 17 International wood fuel standards and classes

The general fuel specifications and classes for all solid biofuels are set out in BS EN ISO 17225-1:2014<sup>1</sup>, which defines certain parameters and property classes. On top of this are BS EN ISO 17225 parts 2 to 5 which cover the fuel specifications and classes for specific types of solid biofuels for non-industrial usage, such as wood pellets, chips, firewood, etc.

Some of the key standards that apply to solid biofuels are listed below.

The old BS EN standards have in many cases now been superseded by the ISO<sup>2</sup> equivalent. In these cases the old BS EN standards are in brackets.

Standard Reference	Title
BS EN ISO 16559:2014 (BS EN 14588:2010)	Solid biofuels - Terminology, definitions and descriptions
BS EN ISO 18134-1:2015 (BS EN 14774-1:2009)	Solid biofuels - Determination of moisture content - Oven dry method - Part 1: Total moisture - Reference method
BS EN ISO 18134-2:2015 (BS EN 14774-2:2009)	Solid biofuels - Determination of moisture content - Oven dry method - Part 2: Total moisture - Simplified method
BS EN ISO 18134-3:2015 (BS EN 14774-3:2009)	Solid biofuels - Determination of moisture content - Oven dry method - Part 3: Moisture in general analysis sample
BS EN ISO 18122:2015 (BS EN 14775:2009)	Solid biofuels - Determination of ash content
BS EN ISO 18135:2017 (BS EN 14778:2011)	Solid biofuels - Sampling
BS EN ISO 14780:2017 (BS EN 14780:2011)	Solid biofuels - Sample preparation
BS EN ISO 18125:2017 (BS EN 14918:2009)	Solid biofuels - Determination of calorific value
BS EN ISO 17225-1:2014 (BS EN 14961-1:2010)	Solid biofuels - Fuel specifications and classes - Part 1: General requirements

<sup>1</sup> EN indicates that it is a European standard, BS indicates that it is a British standard and ISO indicates that it is an International Standards Organisation standard

<sup>2</sup> The ISO wood fuel standards have been adopted by Europe, United Kingdom, Canada and many other countries. Bioenergy Association considers that the ISO wood fuel standards are also appropriate for New Zealand, Australia and the Pacific.

Recommended additional section to be added as new section 17 to Technical Guide 1 – Solid Biofuel Classification Guidelines

BS EN ISO 17225-2:2014 (BS EN 14961-2:2011)	Solid biofuels - Fuel specifications and classes - Part 2: Wood pellets for non-industrial use
BS EN ISO 17225-3:2014 (BS EN 14961-3:2011)	Solid biofuels - Fuel specifications and classes - Part 3: Wood briquettes for non-industrial use
BS EN ISO 17225-4:2014 (BS EN 14961-4:2011)	Solid biofuels - Fuel specifications and classes - Part 4: Wood chips for non-industrial use
BS EN ISO 17225-5:2014 (BS EN 14961-5:2011)	Solid biofuels - Fuel specifications and classes - Part 5: Firewood for non-industrial use
BS EN ISO 17828:2015 (BS EN 15103:2009)	Solid biofuels - Determination of bulk density
BS EN ISO 18123:2015 (BS EN 15148:2009)	Solid biofuels - Determination of volatile matter
BS EN ISO 17827-1:2016 (BS EN 15149-1:2010)	Solid biofuels - Determination of particle size distribution. Oscillating screen method using sieve apertures of 1 mm and above
BS EN ISO 17827-2:2016 (BS EN 15149-2:2010)	Solid biofuels - Determination of particle size distribution. Vibrating screen method using sieve apertures of 3.15 mm and below
BS EN ISO 17831-1:2016 (BS EN 15210-1:2009)	Solid biofuels - Determination of mechanical durability of pellets and briquettes. Pellets
BS EN ISO 17831-2:2016 (BS EN 15210-2:2010)	Solid biofuels - Determination of mechanical durability of pellets and briquettes. Briquettes
BS EN 15234-1:2011	Solid biofuels - Fuel quality assurance - Part 1: General requirements
BS EN 15234-2:2012	Solid biofuels - Fuel quality assurance - Part 2: Wood pellets for non-industrial use
BS EN 15234-3:2012	Solid biofuels - Fuel quality assurance - Part 3: Wood briquettes for non-industrial use
BS EN 15234-4:2012	Solid biofuels - Fuel quality assurance - Part 4: Wood chips for non-industrial use
BS EN 15234-5:2012	Solid biofuels - Fuel quality assurance - Part 5: Firewood for non-industrial use
BS EN 15234-6:2012	Solid biofuels - Fuel quality assurance - Part 6: Non-woody pellets for non-industrial use