



(BS) EN 13501-1: 2007

Fire Classification of Construction Products and Building elements - Classification using test data from reaction to fire tests +A1 : 2009

This standard provides the reaction to fire classification procedure for all construction products (including wood-based products). It includes products incorporated within building elements. It is referenced in the harmonised European standard for wood-based panel products, EN 13986.

Products are considered in relation to their end use application and divided into two separate categories - construction products, excluding floors; and flooring.

There are seven classes of reaction to fire , A1, A2, B, C, D, E and F, plus

Two sets of additional classifications for:

Smoke production - s1, s2 and s3

Flaming droplet/particles - d0, d1 and d2

The five test methods used depending upon the end use application are:

Non-combustibility test (prEN ISO 1182)

Calorific potential test (prEN ISO 1716)

Single burning item test (EN 13823)

Ignitability test (prEN ISO 11925-2)

Burning behaviour, flooring +radiant source (prEN ISO 9239-1)



The Engineered Wood Association

Using American Engineered Wood Products in the UK and EU

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Table showing plywood and OSB reaction to fire classification, as per EN 13986					
Wood-based panel product*	EN grade reference	Minimum density (kg/m ³)	Minimum thickness (mm)	Class Excluding flooring	Class flooring
Plywood	EN 636	400	9	D-s2, d0	D _{FL} -s1
OSB	EN 300	600	9	D-s2, d0	D _{FL} -s1
LVL	No reaction classification given in any EN				

*Wood-based panels mounted without an air gap directly against class A1 or A2-s1, d0 products with minimum density 10kg/m³ or at least class D-s2, d0 products with minimum density 400 kg/m³