

Reaction to fire class of CEWOOD Acoustic panels

The ability or inability of building materials to burn is tested and then defined by determining the reaction to fire class. It is mandatory to test and declare for the CE mark in EU. The classification gives an opportunity to assess the level of danger that the building material can pose in the event of fire.

Building materials including CEWOOD panels are tested and classified for reaction to fire in accordance with standard EN 13501-1. The classification is based on 3 main material performance factors:

- Combustibility and fire development (A1; A2, B, C, D, E, F class)
- Smoke development (s1, s2, s3 class)
- Formation of flaming droplets (d0, d1, d2 class)

Note that ceiling and wall finishing materials can significantly affect the development of fire indoors, as well as the amount of time and safety level of evacuation in the event of fire.

CEWOOD Acoustic panels in reaction to fire tests achieve very high results. CEWOOD Acoustic panels are classified as **A2 - s1, d0** and **B1 - s1, d0**.



A2 - s1, d0

B1 - s1, d0

The main indicator is whether the material is able to stop the fire or spread it further. CEWOOD Acoustic panels achieve **A2** and **B** classes which indicates that the material does not contribute to the occurrence of flashover in a compartment during fire.

The second indicator is smoke development. CEWOOD Acoustic panels achieve the highest results, thus being rated as class **s1** – materials that do not emit smoke or emit it in a small amount.

In terms of the third indicator – formation of flaming particles and droplets – CEWOOD panels also achieve the highest class **d0** – droplets and particles are not formed.

Although, CEWOOD panels are made of thin wood wool, each of the wooden fibres is fully covered and protected by a non-combustible cement layer. All of the above-mentioned indicators prove the high fire safety level of CEWOOD materials, which is why these panels are often chosen for industrial and public buildings, as well as educational institutions.

