Classes of reaction to fire performance – End use condition

In conformity with the harmonized standard EN 13986 – which determines the specifications for CE marking of wood- based panels – the class of reaction to fire performance has to be determined in accordance with EN 13501. The European commission allows the classification for wood based panels with defined minimum density and minimum thickness without further testing, too.

To achieve the classes of reaction to fire performance as they are mentioned in the technical data sheets, the following end use conditions are required:

Particleboard D-s2, d0:

The class of reaction to fire performance is valid for wood- based panels which are raw, covered, veneered or lacquered.

- Minimum density 600 kg/m^3
- Minimum thickness 9 mm
- End use condition: without an air gap behind the wood-based panel
  Additional:
  - Mounted without an air gap directly against class A1 or A2-s1, d0 products with minimum density 10kg/m^3 or at least class D-s2, d0 products with minimum density 400 kg/m^3.
  - A substrate of cellulose insulation material of at least class E may be included if mounted directly against the wood-based panel, but not for floorings.
  - Veneered, phenol- and melamine-faced panels are included for class excl. floorings.

- Minimum density 600 kg/m^3
- Minimum thickness 15 mm
- End use condition: With a closed air gap behind the wood-based panel
  Additional:
  - Mounted with an air gap behind. The reverse face of the cavity shall be at least class D-s2, d2 products with minimum density 400kg/m^3.
  - Veneered, phenol- and melamine-faced panels are included for class excl. floorings.

- Minimum density 600 kg/m^3
- Minimum thickness 18 mm
- End use condition: With an open air gap behind the wood-based panel

Additional:

- o Mounted with an air gap behind. The reverse face of the cavity shall be at least class D-s2, d2 products with minimum density 400kg/m^3.
- o Veneered, phenol- and melamine-faced panels are included for class excl. floorings.

Particleboard B-s2, d0:

- Test report available on request.
  - o Valid with or without air gap on a A2 substrate.

MDF D-s2, d0:

The class of reaction to fire performance is valid for wood based panels which are raw, covered, veneered or lacquered.

- Minimum density 600 kg/m^3
- Minimum thickness 9 mm
- End use condition: without an air gap behind the wood-based panel
  Additional:
  - o Mounted without an air gap directly against class A1 or A2-s1, d0 products with minimum density 10kg/m^3 or at least class D-s2, d0 products with minimum density 400 kg/m^3.
  - o A substrate of cellulose insulation material of at least class E may be included if mounted directly against the wood-based panel, but not for floorings.
  - o Veneered, phenol- and melamine-faced panels are included for class excl. floorings.

- Minimum density 600 kg/m^3
- Minimum thickness 15 mm
- End use condition: With a closed air gap behind the wood-based panel
  Additional:
  - o Mounted with an air gap behind. The reverse face of the cavity shall be at least class D-s2, d2 products with minimum density 400kg/m^3.
  - o Veneered, phenol- and melamine-faced panels are included for class excl. floorings.

- Minimum density 600 kg/m^3
- Minimum thickness 18 mm
- End use condition: With an open-air gap behind the wood-based panel

Additional:

- o Mounted with an air gap behind. The reverse face of the cavity shall be at least class D-s2, d2 products with minimum density 400kg/m^3.
- o Veneered, phenol- and melamine-faced panels are included for class excl. floorings.

MDF B-s2, d0:

- Test report available on request.
  - o Valid with or without air gap on a A2 substrate.

Important!

In case of end use conditions other than the ones mentioned above, the fire performance will change. The class of reaction to fire performance as it is specified above may not be valid anymore!