

Laboratory for Fire Safety

Summary of the reaction to fire performance

AKOpanel PETpanel 25 mm

On behalf of AKOpanel BV a study on the burning behaviour ('reaction to fire') of AKOpanel PETpanel 25 mm has been carried out. The tests were performed in the Peutz Laboratory for Fire Safety in accordance with the European test standard EN-ISO 11925-2:2020 and EN 13823:2020.

This summary provides the reaction to fire performance and a brief description of the tested product. For a complete description of the product, reference is made to the reports described in the footnote.

AKOpanel PETpanel

AKOpanel PETpanel is the name of a range of decorative wall coverings with an acoustic function, consisting of soft felt-like material in various colours and thicknesses.

AKOpanel PETpanel with a thickness of 25 mm in the colour white with a surface weight of approx. 3.1 kg/m² was investigated. The material is composed of recycled PET and virgin PET in the ratio 60% recycled, 40% virgin. The product is used as wall covering product with acoustic function in panel form for mounting on interior walls or partitions by means of mechanical clamping. Fire retardants are not added to the material.



This summary of the reaction to fire classification consists of 2 pages. The reports that form the basis for this summary are available for inspection at the client and are registered as test report Y 2461-2-RA-001, test report Y 2461-3-RA-001, and classification report Y 2461-4-RA-001, all dated 2 February 2022.	Reference HL/NvD//YA 2461-1E-RA-001 11 April 2022	Page 1/2	Initials <i>HL</i>
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Reaction to fire testing

In order to determinate the reaction to fire performance of the PETpanel, two studies were carried out. Firstly, an SBI study (described in EN 13823) was carried out and secondly, an ignitability or Small Flame study was carried out (EN-ISO 11925-2). The samples were tested in combination with a non-combustible substrate. These investigations were carried out in 2021 in the Peutz Fire Safety Laboratory.

Based on the results of the flammability test (Small flame test) and the values determined in the SBI test for total heat release (THR_{600s}) and fire growth rate (FIGRA), the reaction to fire class was determined. The classification of the smoke production was determined on the basis of the total smoke production (TSP_{600s}) and smoke growth rate (SMOGR). The occurrence of flaming droplets is determined on the basis of visual observations during the SBI test and flammability test.

Classification of the reaction to fire performance

Based on the results of the tests carried out in accordance with EN 13823 and EN-ISO 11925-2, a classification in accordance with EN 13501-1:2018 has been drawn up and the AKOpanel PETpanel has been classified as follows:

Classification Reaction to Fire in accordance with EN 13501-1:

B-s2, d0

The classification is valid for the following product parameters:

- Nominal thickness 25 mm
- Surface weight approx. 3.1 kg/m²

The classification is valid for the following end-use applications:

- Mechanical fixed to a non-combustible Substrate (Fire class A2-S1,d0 or better including gypsum boards) with a thickness of at least 12 mm and a density of at least 525 kg/m³
- Edges protected
- No seams of joints
- Air cavity not allowed
- Colour white
- Use as a wall covering product in panel form for hanging on internal walls or partitions

Difference in thickness and colour may lead to a different classification of reaction to fire.

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