

related test method	EN ISO 1182: 2002 Reaction to fire tests for building products – Non-combustibility test
subject	Adjacent layers in a multilayer product which individually meet the criteria for being non-substantial but when considered collectively then meet the criteria for being classed and tested as substantial
reference of original query	TC1 N240rev1 Helpdesk 2003-03

Problem

Should two adjacent layers in a multilayer product which individually meet the criteria for being classed as non-substantial but when considered collectively then meet the criteria for being classed as substantial be tested as being substantial?

Recommendation

The text of §3.6 of EN ISO 1182: 2002 needs to be modified to include an additional statement that when two adjacent non-substantial layers collectively meet the requirements for being “substantial” they be treated as such.

Laboratories shall interpret 3.6 of EN ISO 1182: 2002 as (*new information in italics*):

3.6 Non-substantial component

Material that does not constitute a significant part of a non-homogeneous product. A layer with a mass/unit area < 1,0 kg/m² and a thickness < 1,0 mm is considered to be a non-substantial component.

Two or more non-substantial layers that are adjacent to each other (i.e. with no substantial component(s) in between the layers) are regarded as one non-substantial component when they collectively comply with the requirements for a layer being a non-substantial component.

Two or more non-substantial layers that are adjacent to each other (i.e. with no substantial component(s) in between the layers) are regarded as one substantial component when they collectively comply with the requirements for a layer being a substantial component.

CEN TC127 ad hoc 45 has agreed that Clause 3.6 of EN ISO 1182: 2002 shall be modified to the following [by inclusion of the 2nd paragraph]:



3.6 substantial component – a material that constitutes a significant part of a non-homogeneous product. A layer with a mass/unit area $\geq 1.0\text{kg/m}^2$ or a thickness $\geq 1.0\text{ mm}$ is considered to be a substantial component.

“If the non-substantial layers do not comply with the above requirements, together they shall be considered to be substantial”.

TEST LABORATORIES SHALL FOLLOW THE ABOVE INTERPRETATION AND PROPOSED NEW TEXT WHEN TESTING MULTILAYER PRODUCTS.

Other standards affected:

The text of EN ISO 1716: 2002 shall be modified to include the same definition of non-substantial layers as would be given in the revised §3.6 of EN ISO 1182: 2002.

Clause 3.1.6 of EN 13501-1 shall be reconsidered as a result of these technical recommendations.