

Laboratory for Fire Safety

Summary of the reaction to fire performance: Pyrasied VERSATO PMMA sheets

Introduction

On behalf of PyraSied Xtreme Acrylic a study on the burning behaviour ('reaction to fire') on a range of Pyrasied VERSATO cast Polymethylmethacrylate (PMMA) sheets was carried out. This leaflet provides a summary of the study and the conclusions.

Pyrasied VERSATO

VERSATO is the name of a range of highly decorative cast solid surface polymethylmethacrylate (PMMA) sheets, all made of different acrylics combined to form a single sheet in a large variety of colours. Available in transparent, solid or translucent sheets, ranging from 3 to 20 mm.



The sheet material is suitable for use in furniture, lining for walls and ceilings, displays etc. It can be applied both vertically and horizontally. No flame retardant additives are used in the VERSATO sheets.

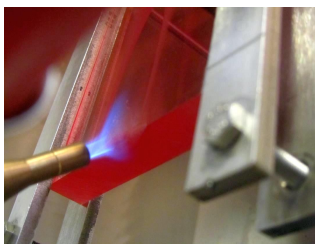
Reaction to fire testing

In order to determinate the flammability of the VERSATO PMMA sheets, a large series of ignitability tests were carried out. Hereby the influence of the thickness and colour on the ignitability of the sheets was reviewed as well.

<p>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 YA 1704-1E-RA 001, extended application report YA 1704-2E-RA, and classification report YA 1704-3E-RA-002, all dated 27 September 2016.</p>	<p>Reference JM/NvD//YA 1704-4E-RA 12 October 2016</p>	<p>Page 1/2</p> <p>Initials JH</p>
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Each specimen is clamped in a specimen holder and subjected to direct impingement of a flame on the surface and on the edge.

The tests were performed according to the standard EN ISO 11925-2:2010. For each test was recorded whether ignition and flame spread along the surface occurred. The occurrence of flaming droplets coming from the tested sheet was recorded.



Description of the test specimens

Since the investigation concerns a material that comes in various thicknesses and colours a test scheme was developed to define the minimum set of tests required to be able to draw up a classification for the entire range of sheets.

In this test scheme the colours black, white, red and colourless transparent cover the entire range of colours.

The sheets were tested in thicknesses ranging from 3 mm to 14 (18 mm for black and white). The density of all sheets is approximately the same.


Reaction to fire classification

The VERSATO PMMA sheets are classified in accordance with EN 13501-1:2007+A1:2009 on the basis of the tests carried out. Pyrasied VERSATO cast Polymethylmethacrylate (PMMA) sheets obtained:

Reaction to fire classification: E

General conditions and field of application

The classification is valid for the Pyrasied VERSATO cast Polymethylmethacrylate (PMMA) sheets in a thickness from 3 to 14 mm in any colour. For the colours black and white the classification is valid for a thickness of up to 18 mm.

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