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Report No. 402099-04

Fire Behaviour Classification according to EN 13501-1:2010

1 Introduction

This fire behaviour classification report defines the classification of the construction product "Markant" in accordance with the procedures according to EN 13501-1:2010.

2 Procedure

| | | |
|-----------------------------|--|------------------------|
| construction product | Construction product | textile floor covering |
| | Sample designation | Markant |
| | Type of manufacture | flat needle felt |
| | Type of surface | structureless |
| | Fibre composition of use surface | 100 % polyamide |
| | Type of backing | textile fleece backing |
| | TFI reference no. | 10-12-0156 |
| | Order date | 03.12.2010 |

Customer Forbo Reims (Textile)
 Report issued by Dipl.-Ing. Ulrike Balg, direct dial -133

The construction product is entirely described in the test report mentioned under section 3 and its annex KT.

3 Test Reports and Test Results Used for the Classification

3.1 Test Reports

| Name of testing body | Ordered by | Construction product | Test report No. | Test methods |
|------------------------------------|-----------------------|------------------------|-----------------|---|
| Textiles & Flooring Institute GmbH | Forbo Reims (Textile) | textile floor covering | 402099-03 | EN ISO 9239-1:2010 |
| | | | | EN ISO 11925-2:2002 (15s ignition time) |

3.2 Test Results

| | Test methods | Characteristics | Number of tests | Test results | |
|----------------------|---------------------|--|-----------------|--------------|------------------------------|
| | | | | average | requirements fulfilled (Y/N) |
| construction product | EN ISO 9239-1:2010 | critical radiant flux (kW/m ²) | 3 | 9,6 | |
| | | smoke development (% x min) | | 53 | |
| | EN ISO 11925-2:2002 | charred distance ≤ 150 mm | 6 | - | Y |

4 Classification and Application

4.1 Reference

This classification is performed according to EN 13501-1:2010.

4.2 Classification

With regard to the fire behaviour, the tested construction product is classified as **B_{fl}**

Additionally, with regard to the smoke development, the tested construction product is classified: **s1**

Thus, the construction product tested obtains the following classification:

| Burning behaviour | | Smoke development | | |
|-------------------|---|-------------------|---|--------------------------|
| B _{fl} | - | s | 1 | i.e. B _{fl} -s1 |

4.3 End-Use Application

The classification is only valid for the construction product as described under sections 2. and 3., used as a horizontal floor covering installed on a mineral substrate according to EN 13238:2010, using adhesives or not.

5 Restrictions

Provided that the construction product is marked with the CE-label according to system 3 attestation of conformity, the following declaration shall be enclosed:

"The classification assigned to the construction product in this report is appropriate to a declaration of conformity by the manufacturer within the context of system 3 attestation of conformity and CE-marking under the Construction Products Directive.

The manufacturer has made a declaration, which is held on file. This confirms that the product's design requires no specific processes, procedures or stages (e.g. no addition of flame-retardants, limitation of organic content, or addition of fillers) that are aimed at enhancing the fire performance in order to obtain the classification achieved. As a consequence the manufacturer has concluded that system 3 attestation is appropriate.

The test laboratory has, therefore, played no part in sampling the product for the test, although it holds appropriate references, supplied by the manufacturer, to provide for traceability of the samples tested.

Aachen, 04.01.2011




 ppa. Dr. Jens-Christian Winkler

The present test report is established to the best of our knowledge. Only the entire report shall be reproduced. Under no circumstances, extracts shall be used. Furthermore, we apply the "General Terms and Conditions for the Execution of Contracts" of the Textiles & Flooring Institute GmbH, also with regard to the order execution.

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