

Test Report no. 053865.1 –Dra
(English Version of the test report no. 050513.1-Dra)

orderer: Alcan Kapa GmbH
Kiefernweg 10
49090 Osnabrück

order date: 19.09.2005 – order number 4514726

title of order: Single-flame source test according to DIN EN ISO 11925-2: 2002-07, Euroclass E, of „Kapa Mount“ sandwich-elements with PUR hard foam core and cardboard surface layers, on both sides aluminum reinforced.

note: The test results relate to the behaviour of the test specimens of a product under the particular conditions of the test; they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use.

This test report consists of 4 pages.

In case of any dispute the german version is decisive.
The test report shall be published unabridged. Any partial publishing requires written allowance by the testing institute. The test results refer only on the tested material.

Bearbeiter Dr. rer. nat. Drake
Durchwahl (05 11) 7 62 – 31 09
E-Mail k-h.drake@mpa-bau.de

Nienburger Straße 3
30167 Hannover

Telefon (05 11) 7 62-31 04
Telefax (05 11) 7 62-40 01



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Niedersachsen



Notifizierte Stelle
0764

1. Sampling and delivery

Sampling: by orderer
Receipt of the samples: 20.09.2005 delivered by DHL
Sample quantity: 20 samples with the dimensions: 250 mm x 90 mm x 10 mm

2. Information about the building product given by the orderer

Identification: Kapa Mount
Description: The building product is made of a flat PUR hard foam core covered on front and rear side with identical surface layers. The 0.3 mm thick surface layers are reinforced by a 9 μm thick aluminum foil.
Scope of application: The PUR hard foam sandwich-elements are used as a framework for digital print-outs, large sized pictures (for example as advertising spaces) etc. The colour of the front and rear side is light-grey-white, the PUR foam core is grey.
Constituents: - PUR hard foam sandwich-element (nominal thickness: 10 mm)
(structure) -- adhesive layer
-- cardboard
-- aluminum foil (thickness: 9 μm)
-- PUR hard foam (nominal gross density: 45 kg/m³)

3. Sample preparation

The samples have been delivered ready for testing.

4. Conditioning

The conditioning of the samples was carried out in accordance with DIN EN 13238: 2001-12.

5. Execution of the test

The fire test was carried out in accordance with DIN EN ISO 11925-2: 2002-07, clause 7.3.

Since front and rear surface of the building product are equal, only one surface is tested.

The samples were tested free-hanging without a substrat. Six surface flame impingements according to clause 7.3.3.1 and six edge flame impingements according to clause 7.3.3.2 were carried out at the surface layer. Because the tickness of the multilayer product exceeds 10 mm according to clause 7.3.3.2.3 an additional set of tests was carried out with the specimen turned at 90° round its vertical axis and the flame impinging at the bottom edge of the centreline of the underside of the PUR foam core.

Duration of flaming: 15 s
Duration of observation: 20 s
Number of tests: 18
Date of tests: 06.10.2005

6. Test results

6.1 Determination of thickness, mass per unit area and gross density

Table 1: Thickness, mass per unit area and gross density

	thickness	mass per unit area	gross density
	mm	kg/m ²	kg/m ³
sandwich-element	10,2	1,10	-
PUR hard foam core	≈ 10	≈ 0,50	≈ 45

6.2 Fire test

Table 2: Fire test in accordance with DIN EN ISO 11925-2, clause 7.3.3.1

specimen no.	surface flame impingement					
	1	2	3	4	5	6
position of flame attack	surface layer					
ignition	yes	yes	yes	yes	yes	yes
max. vertical flame spread mm	20	20	30	20	20	20
top of the flames > 150 mm	no	no	no	no	no	no
time of occurrence s	-	-	-	-	-	-
ignition of the filter paper	no	no	no	no	no	no

Table 3: Fire test in accordance with DIN EN ISO 11925-2, clause 7.3.3.2

specimen no.	edge flame impingement					
	7	8	9	10	11	12
position of flame attack	surface layer					
ignition	yes	yes	yes	yes	yes	yes
max. vertical flame spread mm	50	40	50	60	70	50
top of the flames > 150 mm	no	no	no	no	no	no
time of occurrence s	-	-	-	-	-	-
ignition of the filter paper	no	no	no	no	no	no

Table 4: Fire test in accordance with DIN EN ISO 11925-2, clause 7.3.3.2

	edge flame impingement					
specimen no.	7	8	9	10	11	12
position of flame attack	PUR hard foam core (lateral surface of the sample)					
ignition	yes	yes	yes	yes	yes	yes
max. vertical flame spread mm	90	140	90	100	140	120
top of the flames > 150 mm	no	no	no	no	no	no
time of occurrence s	-	-	-	-	-	-
ignition of the filter paper	no	no	no	no	no	no

Hannover, 12. December 2005

Head of fire laboratory



(ORR Dipl.-Ing. Restorff)



Person responsible



(Dr. rer. nat. Drake)