

Fire protection ability Classification report

Covering:

**12.5 mm perforated gypsum plaster-
boards mounted on timber battens**

Danoline A/S
Kløvermarksvej 6
DK-9500 Hobro
Denmark

File: PC10157
Serial No.: 11366
Ref.: JKJ/ADR/TDJ/CAH
Encl.: 0

Date: 2008-09-11

Danish Institute of Fire and Security Technology

Jernholmen 12, DK-2650 Hvidovre
Tel: +45 36 34 90 00
Website: www.dbi-net.dk

E-mail: dbi@dbi-net.dk
Fax: +45 36 34 90 01

The classification report should only be reproduced
in extenso - in extracts only with a written
agreement with this institute.



The present classification report supersedes DBI's classification report PC10157 dated 2007-11-14.

1 OWNER

Danoline A/S
Kløvermarksvej 6
DK-9500 Hobro
Denmark

2 INTRODUCTION

This classification report defines the classification assigned to the product in accordance with the procedures given in EN 13501-2:2007.

The product has no designation.

3 DETAILS OF CLASSIFIED PRODUCT

3.1 GENERAL

The 12.5 mm perforated gypsum plasterboards are defined as a covering. The covering is mounted on timber battens.

The classification is valid for the following end use application: Covering.

3.2 PRODUCT DESCRIPTION

The covering consist of 12.5 mm perforated or none perforated gypsum plasterboards fixed to timber battens.

The timber battens have the dimensions 10 x 95 mm and are positioned perpendicular to the longitudinal direction of the gypsum plasterboards with a centre distance of 300 mm. The timber battens are fixed to the supporting construction with 35 mm Danogips screws per approx. 300 mm.

The gypsum plasterboards are fixed to the timber battens with Danogips screws, length 35 mm per max. 300 mm along the edges of the boards as well as along the centreline of the boards if the boards have a width of more than 600 mm.



4 TEST REPORTS AND TEST RESULTS IN SUPPORT OF THIS CLASSIFICATION

4.1 FIRE PROTECTION ABILITY TEST REPORT

Name of Laboratory	Name of sponsor	Test report File No.	Test method	Date of test
Danish Institute of Fire and Security Technology	Danoline A/S	PG11709, 2007-05-09	EN 14135:2004	2007-03-29

4.2 TEST RESULTS

Test method	Parameter	Results
EN 14135 After 10 minutes exposure	Integrity	
	- Collapse of the covering or parts of it:	No
	Ignition or charring of the chipboard:	No
	- Burnt, charred, melted or shrunk material on the chipboard:	No
	Insulation	
	- Temperature rise on the unexposed side of the covering:	
	Average:	116 °C
	Maximum:	247 °C
	- Temperature rise on the unexposed side of the covering above the perforation:	
	Average:	203 °C
Maximum:	234 °C	
	- Temperature rise on the unexposed side of the chipboard:	
Average:	110 °C	
Maximum:	205 °C	



5 CLASSIFICATION AND FIELD OF APPLICATION

5.1 REFERENCE

This classification has been carried out in accordance with clause 7.6 of EN 13501-2:2007.

5.2 CLASSIFICATION

The fire protection ability classification for the product is: **K₁ 10** and **K₂ 10**

5.3 FIELD OF APPLICATION

This classification is valid for the following end use conditions for the covering:

General:

- On substrates having a density of at least 300 kg/m³, when K₁ 10 is required.
- On all substrates when K₂ 10 is required.
- With closer spacing between the fixing than used in the test specimen.
- With height of the air gap (the cavity) behind the covering being equal to or larger than used in the test specimen (10 mm).
- Mounted directly on the substrate without air gap.
- For horizontal and vertical application of the covering.

Board:

- With board thickness of 12.5 mm or more
- With mass per unit area was 7.6 kg/m² or more
- With front side surface cardboard with mass per unit area of 220 g/m² or less
- With back side surface cardboard with a mass per unit area of 200 g/m² or less
- With back side surface sound tissue with a mass per unit area of 52 g/m² or less
- The boards can be perforated or none perforated
- Note: The field of application do not cover any backside foils.

**Perforation:**

- The total percentage of perforation area for each board shall not exceed 21.5 % (including the non perforated perimeter boarder around the edge of the board).
- The area of each perforation shall not exceed 52.6 mm².
- The shortest perpendicular distance between two sides in a perforation shall not exceed 4 mm.

6 COMBINED CLASS AND FIELD OF APPLICATION**6.1 INTRODUCTION**

The classification stated above has been carried out for a case, where also reaction to fire requirements apply for the product constituting the covering, compare clause 7.6.1 of EN 13501-2:2003.

6.2 GENERAL

The 12.5 mm perforated gypsum plasterboards are defined as a covering. The covering is mounted on timber battens.

The classification is valid for the following end use application: Covering with determined reaction to fire properties.

6.3 PRODUCT DESCRIPTION FOR THE COMBINED CLASSIFICATION

The product is identical to the described under part 3.2 product description, in this report and under part 3.2 product description in the underlying reaction to fire classification reports.

7 CLASSIFICATION REPORTS IN SUPPORT OF THE COMBINED CLASSIFICATION**7.1 REACTION TO FIRE CLASSIFICATION REPORTS**

Name of Laboratory	Name of sponsor	Report File No.	Standard	Date of Issue
Danish Institute of Fire and Security Technology	Knauf Danogips A/S	PC10070a	EN 13501-1:2002	2006-11-20
Danish Institute of Fire and Security Technology	Knauf Danogips A/S	PC10070b	EN 13501-1:2002	2006-11-20



Danish Institute of Fire and Security Technology	Knauf Danogips A/S	PC10070c	EN 13501-1:2002	2006-11-20
Danish Institute of Fire and Security Technology	Knauf Danogips A/S	PC10070d	EN 13501-1:2002	2006-11-20
Danish Institute of Fire and Security Technology	Knauf Danogips A/S	PC10070e	EN 13501-1:2002	2006-11-20

8 CLASSIFICATION AND FIELD OF APPLICATION

8.1 REFERENCE

This classification has been carried out in accordance with:

- EN 13501-2:2007 clause 7.6 and
- EN 13501-1:2002 clause 10.7, 10.9 and 10.10 and
- EN 14190:2005 Annex C.

8.2 COMBINED CLASSIFICATION

The combined fire protection ability and reaction to fire class for the product is:

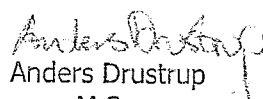
Covering class **K₁10 A2-s1,d0** and **K₂10 A2-s1,d0**

8.3 FIELD OF APPLICATION

This combined class is valid for the end use conditions stated in clause 5.3

9 LIMITATIONS

The combined class is valid for the end use conditions stated in clause 5.3.
All the preconditions stated in this classifications report shall be fulfilled.


Anders Drustrup
M.Sc.


f. Charlotte A. Hellensberg
Laboratory Technician

Danoline A/S
Kløvermarksvej 6
DK-9500 Hobro
Denmark