

Resistance to fire classification report

Classification report No:

K-3420/4076-MPA BS

Product name:

Approximately 125 mm thick Metal stud partition with 12,5 mm thick "FERMACELL Gipsfaser"-panels + 12,5 mm thick "FERMACELL Powerpanel H₂O"-panels on both sides and with a 60 mm thick mineral wool insulation between the studs

Sponsor:

XELLA Trockenbau-Systeme GmbH
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Every sheet of this classification report bear the official stamp of the Testing House.

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1 Introduction

This resistance to fire classification report defines the classification, assigned to the approximately 125 mm thick Metal stud partition with 12,5 mm thick “FERMACELL Gipsfaser”-panels + 12,5 mm thick “FERMACELL Powerpanel H₂O”-panels on both sides and with a 60 mm thick mineral wool insulation between the studs in accordance with the procedures given in DIN EN 13 501-2 : 2003-12.

2 Details of the classified element

2.1 Type of function

The element is defined as a approximately 125 mm thick Metal stud partition with 12,5 mm thick “FERMACELL Gipsfaser”-panels + 12,5 mm thick “FERMACELL Powerpanel H₂O”-panels on both sides and with a 60 mm thick mineral wool insulation between the studs. Its function is to resist fire in respect of the fire performance characteristics given in clause 5 of DIN EN 13 501-2 : 2003-12.

2.2 Description

The above mentioned element is fully described in the test report in support of this classification listed in clause 3.

3 Test reports and test results in support of this classification

This classification report is supported by the following test reports.

Name of Laboratory	Name of sponsor	Test reports / extended application report Nos.	Test method / extended application rules & date
MPA Braunschweig	XELLA Trockenbau-Systeme GmbH, Duisburg	(3606/5005) – Ap from 22.07.2005	DIN EN 1364-1 : 1999-10, DIN EN 1363-1 : 1999-10



Table 1:Exposure conditions:

Temperature/time curve:	temperature-time curve (standardized) according DIN EN 1363-1 : 1999-10 clause 5.1.1
Direction of fire exposure:	symmetrical specimen, heated on one face
Number of fire exposed sides:	one
Applied load:	non load bearing construction
Support conditions:	supported on three sides (one vertical edge free)

Table 2: Test results

Loadbearing capacity (R)	
Time of collapse (min.):	-
Deformation criterion exceeded after (min.):	-
Integrity (E)	
Time of ignition of cotton pad (min.):	> 120
Time of occurrence of sustained flaming (min.):	> 120
Time of failure of gap gauge criterion (min.):	> 120
Thermal insulation (I)	
Time after which the mean temperature rise at the unexposed side exceeds 140 °C (min.):	> 120
Time after which the maximum temperature rise at the unexposed side exceeds 180 °C (min.):	> 120

4 Classification and direct field of application

4.1 Reference of classification

This classification has been carried out in accordance with clause 7.5.2 of DIN EN 13 501-2 : 2003-12.

4.2 Classification

The above mentioned element is classified according to the following combinations of performance parameters and classes. No other classifications are permitted.

R	E	I	W	-	T	-	M	C	S	G	K
-	120	120	-	-	-	-	-	-	-	-	-

4.3 Field of direct application

The following deviations to the element are directly applicable according the provisions of DIN EN 13 501-2 : 2003-12 in conjunction with DIN EN 1364-1 : 1999-10. Furthermore the construction has to comply with the appropriate design code for its stiffness and stability.



Deviations from tested construction	Assessment
a) Decrease in height	acceptable
b) Increase in the thickness of the wall	acceptable
c) Increase of thickness of component materials	acceptable
d) Decrease in linear dimensions of boards or dimensions of panels of but not thickness	acceptable
e) Decrease in stud spacing	acceptable
f) Decrease in distance of fixing centres	acceptable
g) Increase in the number of horizontal joints when tested one joint not more than 500 mm from the top edge.	acceptable
h) The use of surface fittings and fixtures	not acceptable
i) Increase in the width when tested with one vertical free edge	acceptable
k) Increase in height to 4 m when <ol style="list-style-type: none"> 1. maximum of sidewise deflection of specimen ≤ 100 mm 2. proportional increase of expansion possibilities 	not acceptable

5 Limitations

5.1 Restrictions

The period of validity of this classification report is limitless.

5.2 Warning

This report does not represent type approval or certification of the element.



Classification report	Name	Signature ^{a)}	Date
Prepared by	S. Schmieder	<i>Schmieder</i>	12.10.2006
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