



REPORT No. 094753-001-2-a

CUSTOMER	PLACACEM, LDA
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PURPOSE	CLASSIFICATION REPORT ACCORDING TO STANDARD EN 13501-2:2016
TESTED SAMPLE	FLEXIBLE PARTITION REF. « SECOLITE® WSE: 12,5 SECOLITE®CB + WSE (75 - MW) + 12,5 PB + 12,5 PB »
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1.- INTRODUCTION

This classification report defines the fire resistance rating assigned to an external non-loadbearing wall referenced as REF. «**SECOLITE® WSE: 12,5 SECOLITE® CB + WSE (75 - MW) + 12,5 PB + 12,5 PB**» in accordance with the procedures given in [C].

1.1 REFERENCE STANDARDS

- [A] *EN 1363-1:2020 “Fire resistance tests – Part 1: General requirements”.*
- [B] *EN 1364-1:2015 “Fire resistance tests for non-loadbearing elements. Part 1: Walls”.*
- [C] *EN 13501-2:2016 “Fire classification of construction products and building elements - Part 2: Classification using data from fire resistance tests, excluding ventilation services”.*

2.- DETAILS OF CLASSIFIED ELEMENT

2.1 GENERAL INFORMATION

The sample referenced as «**SECOLITE® WSE: 12,5 SECOLITE® CB + WSE (75 - MW) + 12,5 PB + 12,5 PB**», is defined as a non-loadbearing, fire resistant outer wall as stated in [C] 7.5.3.

2.2. DESCRIPTION OF THE SAMPLE

The element, a non-loadbearing outer wall with reference «**SECOLITE® WSE: 12,5 SECOLITE® CB + WSE (75 - MW) + 12,5 PB + 12,5 PB**», is fully described in the test report that supports this classification listed in Section 3.1.

The main descriptive characteristics were provided by the applicant.

This information is included in Annex 4 (*) of the test report mentioned in Section 3.1 of this document.

The verification of the sample was carried out during its assembly.

The data of the samples verified by the laboratory are as follows:

Materials used (*)**- Framing:**

Designation	Make, model	Material	Cross-section (mm)	Thickness (mm)
[C]	-	Galvanised steel	40/75/40	1
[M]	-	Galvanised steel	51/73/49	1

- Bolts:

Designation	Make, model	Type	Material	Diameter (mm)	Length (mm)
[T1]	-	Self-tapping	Alkali resistant steel	3.9	25
[T2]	-	Self-tapping	Phosphate coated steel	3.9	25
[T3]	-	Self-tapping	Phosphate coated steel	3.9	35
[T4]	-	Fixing anchor	Steel	6.0	30

- Board:

Designation	Make, model	Material	Density (kg/m ³)	Dimensions (mm)
[P1]	SECOLITE® Cement Board	Cement board with fibreglass mesh	>1000	2400x1200x12.5
[P2]	-	Gypsum plasterboard	607	3000x1200x12.5

- Sealant:

Designation	Make, model	Material	Characteristics
[Pa1]	-	Cement plaster	Surface and joint mortar
[Pa2]	-	Joint filler	Fast-drying paste

- Mineral wool:

Designation	Make, model	Material	Thickness (mm)	Density
[LM]	-	Mineral wool.	60	-

- Joint tape:

Designation	Make, model	Material	Dimensions
[Ci1]	-	Fibreglass strip	125 mm
[Ci2]	-	Micro-perforated paper tape	-

- Silicone:

Designation	Make, model	Material	Characteristics
[Si]	-	Silicone	Silicone sealer

Definition of the sample

Flexible partition constructed using a galvanised steel sheet metal profile structure made up of studs [M] placed every 600 mm a/a and channels [C] at the top and bottom of the sample fastened to the supporting construction with fixing anchor [T4]. Two layers of gypsum plasterboards [P2] were secured by self-tapping screws [T2] and [T3] (screw spacing: 250 mm) Inside the core of the studs there was mineral wool [LM] of 60 mm thickness. The Secolite ® cement board [P1] was placed horizontally on the opposite side of the gypsum plasterboards and secured by screws [T1] (screw spacing: 200 mm). The joints and screw heads on gypsum plasterboards [P2] were filled with gypsum based joint filler [PA2], while joints and screw heads on cement boards were filled with cement plaster [PA1]. Fibreglass strip [Ci1] was placed on all cement board joints, while micro-perforated paper joint tape [Ci2] was placed on gypsum plasterboards. The butt joints were positioned on the final layer of the side unexposed to fire, in accordance with the diagram. The sample perimeter was sealed using acrylic silicone [Si].

The sample was tested with dimensions of (3000 x 3000) mm and a free moving edge.



Assembly

Sample assembly was entirely performed by the customer.

No additions were made to the sample subsequent to the laboratory review.

In accordance with [B] 6.3.2, one of the vertical sides of the assembly was not fixed, leaving a gap of 25 mm between the sample side and the test frame, which was filled with a flexible fireproof material.

For further information, refer to the construction details in Annex 1 of the test report included in Section 3.1 of this report.

3.- TEST REPORT AND TEST RESULTS SUPPORTING THE CLASSIFICATION

3.1 TEST REPORTS

Laboratory name	Applicant's name	Report reference No.	Test method	Direction of test	Test date
TECNALIA RESEARCH & INNOVATION	PLACACEM, LDA	094753-001-1	[B]	Asymmetric sample. Fire on the side of the gypsum plasterboards	01.09.2021

3.2 RESULTS

Test results

«SECOLITE® WSE:
12,5 SECOLITE® CB
+ WSE (75 - MW) +
12,5 PB + 12,5 PB»

Integrity (E)

81 min

Performance criterion

Cotton pad	Flaming or glowing of the cotton pad.	81 min ⁽²⁾
Gauge Ø 6 mm	Openings in the sample which allow the gauge to move more than 150 mm along the opening.	81 min ⁽²⁾
Gauge Ø 25 mm	Openings in the sample allowing the gauge to pass through.	81 min ⁽²⁾
Sustained flaming > 10 s	Sustained flaming on the unexposed side of the sample for more than 10 s.	81 min ⁽²⁾

Insulation (I)

81 min

Performance criterion

Maximum temperature	Initial temperature of each thermocouple not to be exceeded by 180 °C.	81 min
Average temperature	Initial average temperature of thermocouples TR1 to TR5 not to be exceeded by 140 °C.	81 min ⁽¹⁾

⁽¹⁾: Measurement was interrupted due to increase of maximum temperature.

⁽²⁾: The measurement is stopped at the customer's request.



4.- CLASSIFICATION AND FIELD OF APPLICATION

4.1. CLASSIFICATION REFERENCE

This classification was carried out in accordance with [C] Clause 7.

4.2. CLASSIFICATION

According to [C], the outer wall referred to as «**SECOLITE® WSE: 12,5 SECOLITE® CB + WSE (75 - MW) + 12,5 PB + 12,5 PB**», received the following classification:

EI				60		
E				60		

Fire Resistance Classification: EI 60 (i→o)

4.3 DIRECT FIELD OF APPLICATION

The direct field of application of the test results refers to those changes that can be made on a sample after a fire resistance test with a satisfactory result. These variations can be entered automatically without the need for the applicant to obtain additional evaluations, calculations or approvals.

Parameter	Permitted variation	Tested sample
General outer dimensions.	Reduction in height	(3000x3000) mm.
	Increase in wall thickness	112.5 mm total thickness: two standard 12.5 mm gypsum plasterboards + 75 mm stud + 12.5 mm SECOLITE® cement board
	Unlimited increase in width, maintaining the tested construction system	To maximum dimensions (3000 mm) and with a free moving edge
	Increase in height of up to 1.0 m more	Tested at a height of 3000 mm without supporting construction The deformation does not exceed 100 mm The thermal expansion tolerances are increased proportionately.
Component dimensions.	Reduce linear dimensions of the panels except for the thickness	Gypsum plasterboards: Boards 1200 mm in width and 3000 mm in height SECOLITE® cement board: Boards 1200 mm in width and 2400 mm in height
	Increase in thickness of constituting materials	Gypsum plasterboard thickness: 12.5 mm SECOLITE® cement board thickness: 12.5 mm Stone wool thickness: 60 mm Channel thickness: 1 mm Stud thickness: 1 mm
Construction details.	Reduce the distance	600 mm between studs



	between studs	
	Increase the number of horizontal seals of the same type to that tested, whereby a seal is tested at 500 +/- 150 mm from the upper part of the wall	Continuous horizontal seal on the unexposed side at a distance of 600 mm from the upper part of the wall
	Increase quantity of vertical seals of the same type as the one tested	Vertical joints 600 and 1200 mm long
	Reduce the distance between attachments.	Gypsum plasterboard: Fixed every 250 mm vertically and 600 mm horizontally. SECOLITE® cement board: Fixed every 200 mm vertically and 600 mm horizontally
Supporting construction.	Valid for securing to high density supporting constructions: ≥ 850 kg/m3.	Tested without supporting construction.

Any modifications that have not been expressly included in the sections above will not be considered for the purpose of possible changes without due additional express approval.

5.- LIMITATIONS

This classification report does not represent any sort of product approval or certification.