The Building Test Centre
Fire Acoustics Structures

The Building Test Centre
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CLASSIFICATION OF FIRE RESISTANCE PERFORMANCE IN ACCORDANCE WITH BS EN 13501-2:2016

Sponsor:	**British Gypsum** East Leake Loughborough Leicestershire LE12 6HX
Prepared by:	**The Building Test Centre** East Leake Loughborough Leicestershire LE12 6NP www.btconline.co.uk
Product name:	63 MM DEEP TIMBER STUD PARTITION CLAD EACH SIDE WITH A SINGLE LAYER OF 15 MM GYPROC SOUNDBLOC 15MM
Classification report No:	BTC 22679FC
Issue number:	One
Date of issue:	16th June 2023

This classification report consists of 7 pages and may only be reproduced in its entirety.

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1. Introduction

This classification report defines the classification assigned to element 63 mm deep timber stud partition clad each side with a single layer of 15 mm Gyproc SoundBloc 15mm, in accordance with the procedures given in BS EN 13501-2:2016.

2. Details of Classified Product

2.1 Product Description

The element, 63 mm deep timber stud partition clad each side with a single layer of 15 mm Gyproc SoundBloc 15mm, fully described below, is provided in support of the classification, listed in Clause 3.1.

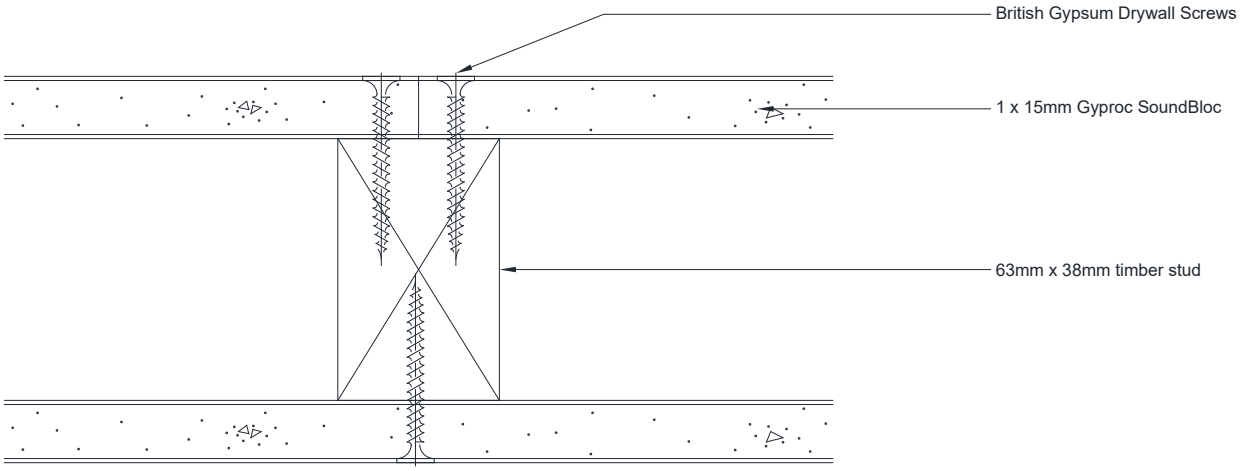

Figure 1. Horizontal cross section – 63 mm deep timber stud partition clad each side with a single layer of 15 mm Gyproc SoundBloc 15mm.

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Construction Details

The specimen was constructed in a refractory concrete lined steel restraint test frame with an opening of 3000 mm (high) x 3000 mm (wide).

63 mm x 38 mm timber head and sole plates were fixed to the head and base of the test aperture at 600 mm centres using 100 mm fire resistant fixings.

63 mm x 38 mm timber studs were positioned at 600 mm centres between the head and sole plates and skew fixed using 75 mm British Gypsum Drywall Screws 75mm. The right hand stud viewed from the unexposed face was not fixed to the perimeter of the test frame, and the gap between the stud and the frame lining was filled with a 25 mm thick rock mineral fibre gasket.

At the left-hand edge a 63 mm x 38 mm timber stud was used to fix the partition to the test frame, using 100 mm fire resistance fixings at 600 mm centres.

63 mm x 38 mm timber stud noggings were positioned between the studs at 2400 mm from the base of the specimen and skew fixed using 75 mm British Gypsum Drywall Screws 75mm.

Thermocouples were added to the timber studs at mid height on the web, hot and cold faces of the central two studs.

Both the unexposed face and the exposed face of the specimen were clad with a single layer of 15 mm Gyproc SoundBloc 15mm. The boards were fixed with 40 mm British Gypsum Drywall Screws 40mm at 300 mm centres around the perimeter and within the field of the boards.

All vertical joints were staggered between layers, with a full board at the free end of the exposed face. A horizontal joint was positioned at 2400 mm from the base on the outer layer boards on both faces of the specimen.

All external board joints were taped and filled using Gyproc Paper Joint Tape and Gyproc Joint Filler as appropriate. All screw heads were spotted using Gyproc Joint Filler.

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3. Test Reports / Extended Application Reports and Test Results in Support of Classification

3.1 Test Reports / Extended Application Reports

Name of Laboratory	Name of sponsor	Test reports / extended application report Nos.	Test method / extended application rules & date
The Building Test Centre	British Gypsum	BTC 21757F	BS EN 1364-1:2015

3.2 Test Results

Test method & Test number	Parameter		Results
BS EN 1364-1:2015 BTC 21757F	Integrity	Sustained Flaming	83 minutes, no failure
		6 mm Gap Gauge	82 minutes
		25 mm Gap Gauge	83 minutes, no failure
		Cotton Pad	83 minutes, no failure
	Insulation		75 minutes

All data can be found in the relevant test report.

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4. Classification and Field of Application

4.1 Reference of Classification

This classification has been carried out in accordance with clause 7.5.2 of BS EN 13501-2:2016.

4.2 Classification

The element, 63 mm deep timber stud partition clad each side with a single layer of 15 mm Gyproc SoundBloc 15mm, is classified according to the following combinations of performance parameters and classes as appropriate.

R	E	I	W		t	t	-	M	S	C	IncSlow	sn	ef	r	G	K

Fire resistance classification: EI 60

4.3 Field of Application

This classification is valid for any of the following end use applications, as specified in BS EN 1364-1: 2015.

i) Decrease in height.

ii) Increase in the thickness of the wall.

iii) Increase thickness of component materials.

iv) Decrease in the linear dimensions of the boards but not thickness.

v) Decrease stud spacing.

vi) Decrease in fixing centres.

vii) Increase in the number of horizontal joints, of the type tested, when tested with one joint not more than (500±150) mm from the top edge.

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Extension of Width

For test specimens tested without a supporting construction, the width of an identical construction may be increased as the specimen was tested at nominally 3000 mm wide with one vertical edge without restraint.

Extension of Height

The height of the construction may be increased by 1000 mm under the following conditions:

30 minutes	60 minutes
≤ 100 mm	≤ 100 mm

5. Limitations

This classification document does not represent type approval or certification of the product.

6. Authorisation

SIGNED

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Matthew Porter
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Technical Lead Assessor

APPROVED

……

Paul Miller
BSc. (Hons.)
Fire Test Manager