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Fire Acoustics Structures

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Assessment Number **BTC 14532FA**

A FIRE RESISTANCE ASSESSMENT ON A GYPWALL
QUIET SF METAL STUD PARTITION SYSTEM CLAD
WITH AN INNER LAYER OF 15mm GYPROC FIRELINE
& AN OUTER LAYER OF 15mm GYPROC DURALINE,
CONDUCTED IN ACCORDANCE WITH F.T.S.G.
RESOLUTION No. 82 / PFPF GUIDE.

Assessment Date: 19th April 2006

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Applicant: **British Gypsum Limited**
East Leake
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A FIRE RESISTANCE ASSESSMENT ON A GYPWALL QUIET SF METAL STUD PARTITION SYSTEM CLAD WITH AN INNER LAYER OF 15mm GYPROC FIRELINE & AN OUTER LAYER OF 15mm GYPROC DURALINE, CONDUCTED IN ACCORDANCE WITH F.T.S.G. RESOLUTION No. 82 / PFPF GUIDE.

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DETAILS OF THE REQUEST

It is required to assess the following Gypwall Quiet SF metal stud partition systems for 120 minutes fire resistance performance if tested in accordance with BS EN 1364-1: 1999 for a fire state height of 4 metres.

The proposed constructions are as follows:

Construction 1 (Gypframe RB1 On The Exposed Face)

The specimen is constructed in a refractory concrete lined steel restraint frame having an opening of 3000mm high x 3000mm wide.

Gypframe 72C50 Standard Floor & Ceiling Channels are fixed to the head and base of the test aperture at 600mm centres with 60mm fire resistant fixings. Gypframe 70S50 'C' Studs are positioned at 600mm centres between the channels. The right hand stud viewed from unexposed face is not fixed to the perimeter test frame, and the gap between the stud and the frame lining is filled with a 25mm rock mineral fibre gasket. At the left-hand end a Gypframe 70S50 'C' Stud is used to fix the partition to the test frame with 60mm fire resistant fixings at 600mm centres.

50mm Isowool Acoustic Partition Roll (1200) is positioned in the partition cavity.

Gypframe RB1 Resilient Bar is fixed horizontally to the metal framework on the exposed face at 600mm centres with Gyproc Wafer Head Drywall Screws. The Gypframe RB1 Resilient Bar is positioned such that it backs the partitions horizontal joints (see below). Sections of Gypframe RB1 Resilient Bar are fixed vertically to the fixed end stud using two Gyproc Wafer Head Drywall Screws per section.

The Gypframe RB1 Resilient Bar on the exposed face is lined with an inner layer of 15mm Gyproc FireLine and an outer layer of 15mm Gyproc DuraLine board. The inner layer is fixed around the perimeter and within the field of the board with 32mm Gyproc drywall screws at 300mm centres. The outer layer is fixed around the perimeter and within the field of the board with 42mm Gyproc drywall screws at 300mm centres. All joints are staggered between layers.

The Gypframe 70S50 studs on the unexposed face are lined with an inner layer of 15mm Gyproc FireLine and an outer layer of 15mm Gyproc DuraLine board. The inner layer is fixed around the perimeter with 32mm Gyproc drywall screws at 300mm centres. The outer layer is fixed around the perimeter and within the field of the board with 42mm Gyproc drywall screws at 300mm centres. All joints are staggered between layers.

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Horizontal joints are positioned 2400mm from the base for the outer layers on both the exposed and unexposed faces of the construction. Horizontal joints are positioned 600mm from the base for the inner layers on both the exposed and unexposed faces of the construction.

All horizontal joints on the exposed face coincide with the Gypframe RB1 Resilient Bar positions.

A Gypframe GFS1 Fixing Strap is used behind the horizontal board joint in the unexposed face outer layer.

All joints are taped and filled using Gyproc Paper Joint Tape and Gyproc Joint Filler. All screw heads are spotted using Gyproc Joint Filler.

Construction 2 (Gypframe RB1 On The Unexposed Face)

The specimen is constructed in a refractory concrete lined steel restraint frame having an opening of 3000mm high x 3000mm wide.

Gypframe 72C50 Standard Floor & Ceiling Channels are fixed to the head and base of the test aperture at 600mm centres with 60mm fire resistant fixings. Gypframe 70S50 'C' Studs are positioned at 600mm centres between the channels. The right hand stud viewed from unexposed face is not fixed to the perimeter test frame, and the gap between the stud and the frame lining is filled with a 25mm rock mineral fibre gasket. At the left-hand end a Gypframe 70S50 'C' Stud is used to fix the partition to the test frame with 60mm fire resistant fixings at 600mm centres.

50mm Isowool Acoustic Partition Roll (1200) is positioned in the partition cavity.

Gypframe RB1 Resilient Bar is fixed horizontally to the metal framework on the unexposed face at 600mm centres with Gyproc Wafer Head Drywall Screws. The Gypframe RB1 Resilient Bar is positioned such that it backs the partitions horizontal joints (see below). Sections of Gypframe RB1 Resilient Bar are fixed vertically to the fixed end stud using two Gyproc Wafer Head Drywall Screws per section.

The Gypframe RB1 Resilient Bar on the unexposed face is lined with an inner layer of 15mm Gyproc FireLine and an outer layer of 15mm Gyproc DuraLine board. The inner layer is fixed around the perimeter and within the field of the board with 32mm Gyproc drywall screws at 300mm centres. The outer layer is fixed around the perimeter and within the field of the board with 42mm Gyproc drywall screws at 300mm centres. All joints are staggered between layers.

The Gypframe 70S50 studs on the exposed face are lined with an inner layer of 15mm Gyproc FireLine and an outer layer of 15mm Gyproc DuraLine board. The inner layer is fixed around the

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perimeter with 32mm Gyproc drywall screws at 300mm centres. The outer layer is fixed around the perimeter and within the field of the board with 42mm Gyproc drywall screws at 300mm centres. All joints are staggered between layers.

Horizontal joints are positioned 2400mm from the base for the outer layers on both the exposed and unexposed faces of the construction. Horizontal joints are positioned 600mm from the base for the inner layers on both the exposed and unexposed faces of the construction.

All horizontal joints on the unexposed face coincide with the Gypframe RB1 Resilient Bar positions.

A Gypframe GFS1 Fixing Strap is used behind the horizontal board joint in the exposed face outer layer.

All joints are taped and filled using Gyproc Paper Joint Tape and Gyproc Joint Filler. All screw heads are spotted using Gyproc Joint Filler.

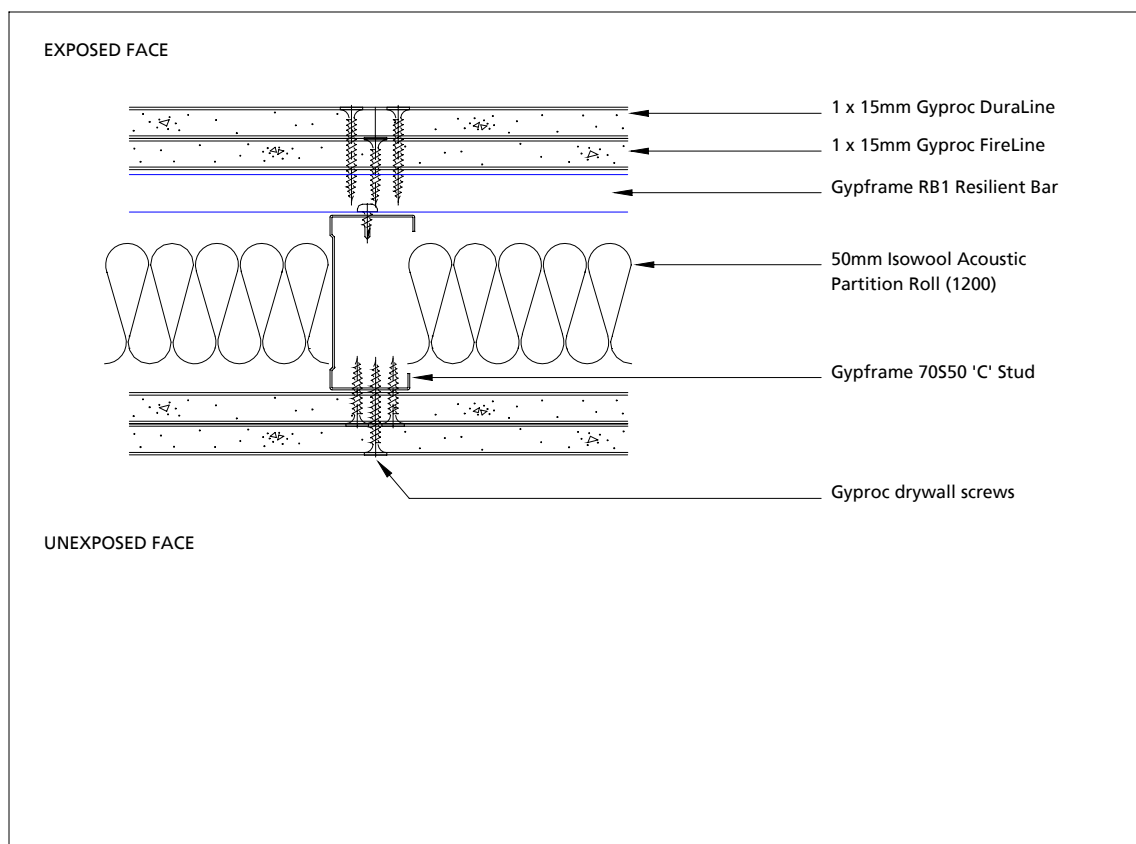


Figure 1. Cross-section through the proposed system (construction 1).

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THE ASSESSORS

The Building Test Centre operates as an independent accredited test house for the construction industry. The Building Test Centre has unrivalled experience in the development of drywall systems. The Building Test Centre is UKAS accredited under No. 0296 for fire resistance, reaction to fire, acoustic and structural testing. The Building Test Centre is wholly owned by British Gypsum Limited a major manufacturer of building products.

The Building Test Centre is a founder member of the Fire Test Study Group an organisation comprising the UKAS accredited fire test laboratories conducting fire testing in the UK primarily for building control approval. The aim of the group is to ensure a common interpretation of test standards by all laboratories.



ASSESSMENT AUTHORISATION

Assessment Author

James McLavy
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Project Leader

Reviewing Assessor

Steve Harms
BEng. (Hons), MIFireE
Fire Test Manager

Assessment Date 19th April 2006.

This assessment is not valid unless it incorporates the Declaration by Applicant form duly signed by the applicant.

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TEST EVIDENCE

The test evidence used in this assessment has been used under the authorisation of the test report owner and has been used with their permission (see Pages 18 & 19). Furthermore, the test evidence has been reviewed in accordance with Annex D of the PFPF guide to ensure that the test reports are still valid.

BTC 12804F

A fire resistance test on a non-loadbearing Gypwall metal stud partition conducted in accordance with BS EN 1364-1: 1999

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

Gypframe 72C50 Standard Floor & Ceiling Channels were fixed to the head and base of the test aperture at 600mm centres with 60mm fire resistant fixings. Gypframe 70S50 'C' Studs were positioned at 600mm centres between the channels. The right hand stud viewed from unexposed face was not fixed to the perimeter test frame and the gap between the stud and the frame lining was filled with a 25mm rock mineral fibre gasket. At the left-hand end a Gypframe 70S50 'C' Stud was used to fix the partition to the test frame with 60mm fire resistant fixings at 600mm centres.

50mm Isowool Acoustic Partition Roll (1200) was positioned in the partition cavity.

The framework was lined both sides with a double layer of 15mm Gyproc FireLine board. The inner layer was fixed around the perimeter with 25mm Gyproc drywall screws at 300mm centres. The outer layer was fixed around the perimeter and within the field of the board with 42mm Gyproc drywall screws at 300mm centres. All joints were staggered between layers.

Horizontal joints were positioned 2700mm from the base for the outer layers on both the exposed and unexposed faces of the construction. Horizontal joints were positioned 300mm from the base for the inner layers on both the exposed and unexposed faces of the construction. A Gypframe GFS1 Fixing Strap was used behind the horizontal board joints in the outer layers.

All 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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The tested construction achieved the following result:

Integrity	167 minutes
Insulation	154 minutes

The test was carried out in accordance with BS EN 1364-1: 1999. The test was carried out on the 10th June 2003 at the Building Test Centre, UKAS accreditation No. 0296. The test was carried out on behalf of British Gypsum Limited.

BTC 11474F

A fire resistance test on a non-loadbearing Gypwall metal stud partition conducted in accordance with BS EN 1364-1: 1999

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

Gypframe 50C50 Standard Floor & Ceiling Channels were fixed to the head and base of the test aperture at 600mm centres with 60mm fire resistant fixings. Gypframe 48S50 'C' Studs were positioned at 600mm centres between the channels. The right hand stud viewed from unexposed face was not fixed to the perimeter test frame and the gap between the stud and the frame lining was filled with a 50mm rock mineral fibre gasket. At the left-hand end a Gypframe 48S50 'C' Stud was used to fix the partition to the test frame with 60mm fire resistant fixings at 600mm centres.

The framework was lined both sides with a double layer of 12.5mm Gyproc SoundBloc board. The inner layer was fixed around the perimeter with 25mm Gyproc drywall screws at 300mm centres. The outer layer was fixed around the perimeter and within the field of the board with 36mm Gyproc drywall screws at 300mm centres. All joints were staggered between layers.

Horizontal joints were positioned 2400mm from the base for the outer layers on both the exposed and unexposed faces of the construction. Horizontal joints were positioned 600mm from the base for the inner layers on both the exposed and unexposed faces of the construction. A Gypframe GFS1 Fixing Strap was used behind the horizontal board joints in the outer layers.

All 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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The tested construction achieved the following result:

Integrity	110 minutes
Insulation	101 minutes

The test was carried out in accordance with BS EN 1364-1: 1999. The test was carried out on the 4th April 2001 at the Building Test Centre, UKAS accreditation No. 0296. The test was carried out on behalf of British Gypsum Limited.

BTC 13482F

A fire resistance test on a non-loadbearing Gypwall Quiet SF metal stud partition conducted in accordance with BS EN 1364-1: 1999

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

Gypframe 72C50 Standard Floor & Ceiling Channels were fixed to the head and base of the test aperture at 600mm centres with 60mm fire resistant fixings. Gypframe 70S50 'C' Studs were positioned at 600mm centres between the channels. The right hand stud viewed from unexposed face was not fixed to the perimeter test frame and the gap between the stud and the frame lining was filled with a 25mm rock mineral fibre gasket. At the left-hand end a Gypframe 70S50 'C' Stud was used to fix the partition to the test frame with 60mm fire resistant fixings at 600mm centres.

50mm Isowool Acoustic Partition Roll (1200) was positioned in the partition cavity.

Gypframe RB1 Resilient Bar was fixed horizontally to the metal framework on the exposed face at 600mm centres with Gyproc Wafer Head Drywall Screws. The Gypframe RB1 Resilient Bar was positioned such that it backs the partitions horizontal joints (see below). Sections of Gypframe RB1 Resilient Bar were fixed vertically to the fixed end stud using two Gyproc Wafer Head Drywall Screws per section.

The Gypframe RB1 Resilient Bar on the exposed face was lined with a double layer of 12.5mm Gyproc SoundBloc board. The inner layer was fixed around the perimeter and within the field of the board with 25mm Gyproc drywall screws at 300mm centres. The outer layer was fixed around the perimeter and within the field of the board with 36mm Gyproc drywall screws at 300mm centres. All joints were staggered between layers.

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The Gypframe 70S50 studs on the unexposed face were lined with a double layer of 12.5mm Gyproc SoundBloc board. The inner layer was fixed around the perimeter with 25mm Gyproc drywall screws at 300mm centres. The outer layer was fixed around the perimeter and within the field of the board with 36mm Gyproc drywall screws at 300mm centres. All joints were staggered between layers.

Horizontal joints were positioned 2400mm from the base for the outer layers on both the exposed and unexposed faces of the construction. Horizontal joints were positioned 600mm from the base for the inner layers on both the exposed and unexposed faces of the construction.

All horizontal joints on the exposed face coincided with the Gypframe RB1 Resilient Bar positions.

A Gypframe GFS1 Fixing Strap was used behind the horizontal board joint in the unexposed face outer layer.

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

The tested construction achieved the following result:

Integrity	120 minutes
Insulation	96 minutes

The test was carried out in accordance with BS EN 1364-1: 1999. The test was carried out on the 2nd September 2004 at the Building Test Centre, UKAS accreditation No. 0296. The test was carried out on behalf of British Gypsum Limited.

BTC 13483F

A fire resistance test on a non-loadbearing Gypwall Quiet SF metal stud partition conducted in accordance with BS EN 1364-1: 1999

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

Gypframe 72C50 Standard Floor & Ceiling Channels were fixed to the head and base of the test aperture at 600mm centres with 60mm fire resistant fixings. Gypframe 70S50 'C' Studs were positioned at 600mm centres between the channels. The right hand stud viewed from unexposed face was not fixed to the perimeter test frame and the gap between the stud and the frame lining was filled with a 25mm rock mineral fibre gasket. At the left-hand end a

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Gypframe 70S50 'C' Stud was used to fix the partition to the test frame with 60mm fire resistant fixings at 600mm centres.

50mm Isowool Acoustic Partition Roll (1200) was positioned in the partition cavity.

Gypframe RB1 Resilient Bar was fixed horizontally to the metal framework on the unexposed face at 600mm centres with Gyproc Wafer Head Drywall Screws. The Gypframe RB1 Resilient Bar was positioned such that it backs the partition's horizontal joints (see below). Sections of Gypframe RB1 Resilient Bar were fixed vertically to the fixed end stud using two Gyproc Wafer Head Drywall Screws per section.

The Gypframe RB1 Resilient Bar on the unexposed face was lined with a double layer of 12.5mm Gyproc SoundBloc board. The inner layer was fixed around the perimeter and within the field of the board with 25mm Gyproc drywall screws at 300mm centres. The outer layer was fixed around the perimeter and within the field of the board with 36mm Gyproc drywall screws at 300mm centres. All joints were staggered between layers.

The Gypframe 70S50 studs on the exposed face were lined with a double layer of 12.5mm Gyproc SoundBloc board. The inner layer was fixed around the perimeter with 25mm Gyproc drywall screws at 300mm centres. The outer layer was fixed around the perimeter and within the field of the board with 36mm Gyproc drywall screws at 300mm centres. All joints were staggered between layers.

Horizontal joints were positioned 2400mm from the base for the outer layers on both the exposed and unexposed faces of the construction. Horizontal joints were positioned 600mm from the base for the inner layers on both the exposed and unexposed faces of the construction.

All horizontal joints on the unexposed face coincided with the Gypframe RB1 Resilient Bar positions.

A Gypframe GFS1 Fixing Strap was used behind the horizontal board joint in the exposed face outer layer.

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

The tested construction achieved the following result:

Integrity	117 minutes
Insulation	102 minutes

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The test was carried out in accordance with BS EN 1364-1: 1999. The test was carried out on the 8th September 2004 at the Building Test Centre, UKAS accreditation No. 0296. The test was carried out on behalf of British Gypsum Limited.

BTC 12728F

A fire resistance test on a non-loadbearing Gypwall metal stud partition conducted in accordance with BS EN 1364-1: 1999

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

Gypframe 72C50 Standard Floor & Ceiling Channels were fixed to the head and base of the test aperture at 600mm centres with 60mm fire resistant fixings. Gypframe 70S50 'C' Studs were positioned at 600mm centres between the channels. The right hand stud viewed from unexposed face was not fixed to the perimeter test frame and the gap between the stud and the frame lining was filled with a 25mm rock mineral fibre gasket. At the left-hand end a Gypframe 70S50 'C' Stud was used to fix the partition to the test frame with 60mm fire resistant fixings at 600mm centres.

The framework was lined both sides with a single layer of 15mm Gyproc FireLine board. The board was fixed around the perimeter and within the field of the board with 25mm Gyproc drywall screws at 300mm centres. All joints were staggered.

Horizontal joints were positioned 2700mm from the base on both the exposed and unexposed faces of the construction. A Gypframe GFS1 Fixing Strap was used behind the horizontal board joints.

All 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.

The tested construction achieved the following result:

Integrity	71 minutes
Insulation	64 minutes

The test was carried out in accordance with BS EN 1364-1: 1999. The test was carried out on the 19th May 2003 at the Building Test Centre, UKAS accreditation No. 0296. The test was carried out on behalf of British Gypsum Limited.

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BTC 13708F

A fire resistance test on a non-loadbearing Gypwall metal stud partition conducted in accordance with BS EN 1364-1: 1999

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

Gypframe 72DC60 Deep Flange Floor & Ceiling Channels were fixed to the head and base of the test aperture at 600mm centres with 60mm fire resistant fixings. Gypframe 70S50 'C' Studs were positioned at 600mm centres between the channels. The right hand stud viewed from unexposed face was not fixed to the perimeter test frame and the gap between the stud and the frame lining was filled with a 25mm rock mineral fibre gasket. At the left-hand end a Gypframe 70S50 'C' Stud was used to fix the partition to the test frame with 60mm fire resistant fixings at 600mm centres.

The framework was lined both sides with a single layer of 15mm Gyproc DuraLine board. The boards were fixed around the perimeter and within the field of the board with 25mm Gyproc drywall screws at 300mm centres. All vertical joints were staggered between layers.

Horizontal joints were positioned 2400mm from the base on both the exposed and unexposed faces of the construction. A Gypframe GFT1 Fixing 'T' was used behind the horizontal board joints.

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

The tested construction achieved the following result:

Integrity	72 minutes
Insulation	62 minutes

The test was carried out in accordance with BS EN 1364-1: 1999. The test was carried out on the 10th January 2005 at the Building Test Centre, UKAS accreditation No. 0296. The test was carried out on behalf of British Gypsum Limited.

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DISCUSSION

Tests BTC 11474F, BTC 13482F & BTC 13483F show a direct comparison of performance with and without Gypframe RB1 Resilient Bar with a double layer 12.5mm Gyproc SoundBloc board. The performances are illustrated in the table below:

Test Number	Exposed Face	Unexposed Face	Insulation	Integrity
BTC 11474F	Direct Fix	Direct Fix	101 minutes	110 minutes
BTC 13482F	RB1	Direct Fix	96 minutes	120 minutes
BTC 13483F	Direct Fix	RB1	102 minutes	117 minutes

These tests show that a slight reduction in insulation performance can be expected if Gypframe RB1 Resilient Bar is added to a Gypwall non-loadbearing metal stud partition (for Gypframe RB1 Resilient Bar mounted on the exposed face).

These tests show that a slight improvement in integrity performance can be expected if Gypframe RB1 Resilient Bar is added to a Gypwall non-loadbearing metal stud partition.

The following correction factor for insulation failure should therefore be considered (for Gypframe RB1 mounted on the exposed face):

$$96 / 101 = 0.95 \text{ (factor } k_1\text{)}$$

Test BTC 12804F is to be used to estimate the performance of the proposed system.

The insulation performance achieved with BTC 12804F is modified by factor k_1 as follows:

$$\text{Insulation failure } 154 \times 0.95 = 146 \text{ minutes}$$

In addition to the inclusion of Gypframe RB1 Resilient Bar the proposed system is clad with an inner layer of 15mm Gyproc DuraLine and an outer layer of 15mm Gyproc FireLine rather than a double layer of 15mm Gyproc FireLine as used in BTC 12804F.

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Tests BTC 12728F & BTC 13708F show the equivalence of 15mm Gyproc DuraLine and 15mm Gyproc FireLine (as illustrated in the table below):

Test Number	Board Specification	Insulation	Integrity
BTC 12728F	1 x 15mm Gyproc FireLine	64 minutes	71 minutes
BTC 13708F	1 x 15mm Gyproc DuraLine	62 minutes	72 minutes

It is the opinion of the assessors that the constructions described under DETAILS OF THE REQUEST would give approximately the following performances:

Exposed Face	Unexposed Face	Insulation	Integrity
RB1	Direct Fix	146 minutes	167 minutes
Direct Fix	RB1	154 minutes	167 minutes

All of the tests used as evidence in this assessment on Gypframe 70S50 'C' studs had a lateral deflection of less than 100mm before the time of insulation failure (see table below).

Test Number	Time of Insulation Failure	Maximum Deflection	Time of Maximum Deflection
BTC 13482F	96 minutes	70mm	76 minutes
BTC 13483F	102 minutes	34mm	95 minutes
BTC 12804F	154 minutes	64mm	153 minutes
BTC 12728F	64 minutes	84mm	64 minutes
BTC 13708F	62 minutes	78mm	62 minutes

It is the opinion of the assessors that the constructions described under DETAILS OF THE REQUEST would not deflect more than 100mm before insulation failure, therefore would be suitable for a fire state height of 4 metres.

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CONCLUSION

In view of the foregoing evidence, it is our opinion that if the constructions described under DETAILS OF THE REQUEST were subjected to fire resistance testing, in accordance with BS EN 1364-1: 1999, they would provide the following period of fire resistance:

Integrity	120 minutes
Insulation	120 minutes

This assessment covers a maximum fire state height of 4 metres.

LIMITATIONS

This assessment addresses itself solely to the ability of the partition system described to satisfy the criteria of the fire resistance test and does not imply any suitability for use with respect to other unspecified criteria.

This assessment is issued on the basis of test data and information to hand at the time of issue. If contradictory evidence becomes available to the assessing authority the assessment will be unconditionally withdrawn and the applicant will be notified in writing. Similarly the assessment is invalidated if the assessed construction is subsequently tested since actual test data is deemed to take precedence over an expressed opinion. The assessment is valid initially for a period of five years after which time it is recommended that it be submitted to the assessing authority for re-appraisal. The opinions and interpretations expressed in this assessment are outside the scope of UKAS accreditation.

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DECLARATION BY THE APPLICANT

We the undersigned confirm that we have read and complied with the obligations placed on us by FTSG Resolution No. 82.

We confirm that the component or element of structure, which is the subject of this assessment, has not to our knowledge been subjected to a fire test to the Standard against which this assessment is being made.

We agree to withdraw this assessment from circulation should the component or element of structure be subjected to a fire test to the Standard against which this assessment is being made.

We are not aware of any information that could adversely affect the conclusion of this assessment.

If we subsequently become aware of any such information we agree to ask the assessing authority to withdraw the assessment.

Signed:

A handwritten signature in black ink, appearing to read 'M Whitley', is written over a horizontal line within a rectangular box.

Print Name Bob Allen Mark Whitley

For and behalf of **British Gypsum Limited**.

Applicant: **British Gypsum Limited**



AUTHORITY FOR USE OF TEST EVIDENCE

Test Report Numbers: BTC 12804F, BTC 11474F, BTC 13482F, BTC 13483F, BTC 12728F & BTC 13708F.

We the undersigned agree to the above Test Reports being used as supporting evidence for the following assessment:

A FIRE RESISTANCE ASSESSMENT ON A GYPWALL QUIET SF METAL STUD PARTITION SYSTEM CLAD WITH AN INNER LAYER OF 15mm GYPROC FIRELINE & AN OUTER LAYER OF 15mm GYPROC DURALINE, CONDUCTED IN ACCORDANCE WITH F.T.S.G. RESOLUTION No. 82 / PFPF GUIDE.

Assessment client: British Gypsum Limited.

Signed:

Print Name Bob Allen Mark Whitley

Job Title: Senior Technical Consultant

Department: Drywall Academy

For and behalf of **British Gypsum Limited**

Applicant: **British Gypsum Limited**