

Assessment Number **BTC 17347FA**

A FIRE TEST ASSESSMENT COMPARING THE  
PERFORMANCE OF 12.5mm GLASROC H TO  
12.5mm GYPROC WALLBOARD, CONDUCTED IN  
ACCORDANCE WITH F.T.S.G. RESOLUTION No. 82  
/PPPF GUIDE.

Assessment Date: 4<sup>th</sup> May 2011

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## A FIRE TEST ASSESSMENT COMPARING THE PERFORMANCE OF 12.5mm GLASROC H TO 12.5mm GYPROC WALLBOARD, CONDUCTED IN ACCORDANCE WITH F.T.S.G. RESOLUTION No. 82 /PPPF GUIDE.

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### DETAILS OF THE REQUEST

It is required to compare the board performance of 12.5mm Glasroc H to 12.5mm Gyproc WallBoard to assess the following constructions for fire resistance performance if tested in accordance with BS476: Part 22:1987 Clause 5 and BS EN 1364-1:1999.

Lightweight non-loadbearing shaftwall systems, which consists essentially of:

#### **Single Layer Construction**

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

Gypframe 50/72FEC50 Standard Floor & Ceiling Folded Edge Channels were fixed to the head and base of the test aperture at 600mm centres using 60mm fire resistant fixings.

Gypframe 48/70S50 'C' Studs were positioned at 600mm centres between the channels. 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 25mm thick rock mineral fibre gasket.

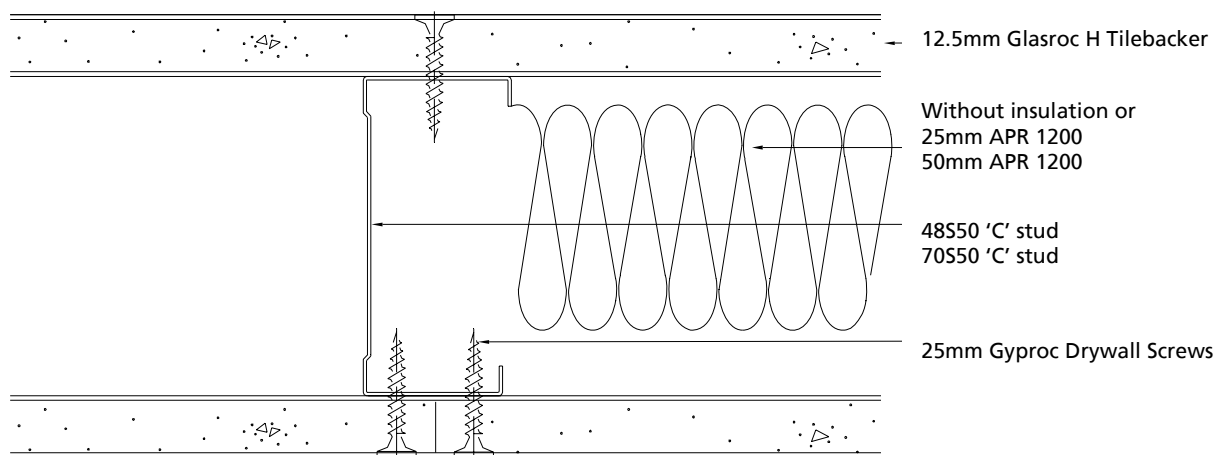
At the left-hand edge a Gypframe 48/70S50 'C' Stud was used to fix the partition to the test frame, using 60mm fire resistance fixings at 600mm centres.

Both the unexposed face and the exposed face of the specimen were clad with a single layer of British Gypsum 12.5mm Glasroc H Tilebacker. The boards were fixed with 25mm Gyproc Drywall Screws at 300mm centres around the perimeter and within the field of the boards.

The cavity was either left unfilled, filled using 25mm APR 1200 or filled using 50mm APR 1200.

A full board was positioned at the free end of the exposed face. A horizontal joint was positioned at 2400 mm from the base, on both faces of the specimen. A Gypframe GFS1 fixing strap was used behind the horizontal outer layer board joint.

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.



**Figure 1 - Horizontal Cross Section**

## Double Layer Construction

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

Gypframe 50/72/148FEC50 Folded Edge Floor & Ceiling Channels were fixed to the head and base of the test aperture at 600mm centres using 60mm fire resistant fixings.

Gypframe 48/70/146S50 'C' Studs were positioned at 600mm centres between the channels. 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 25mm thick rock mineral fibre gasket.

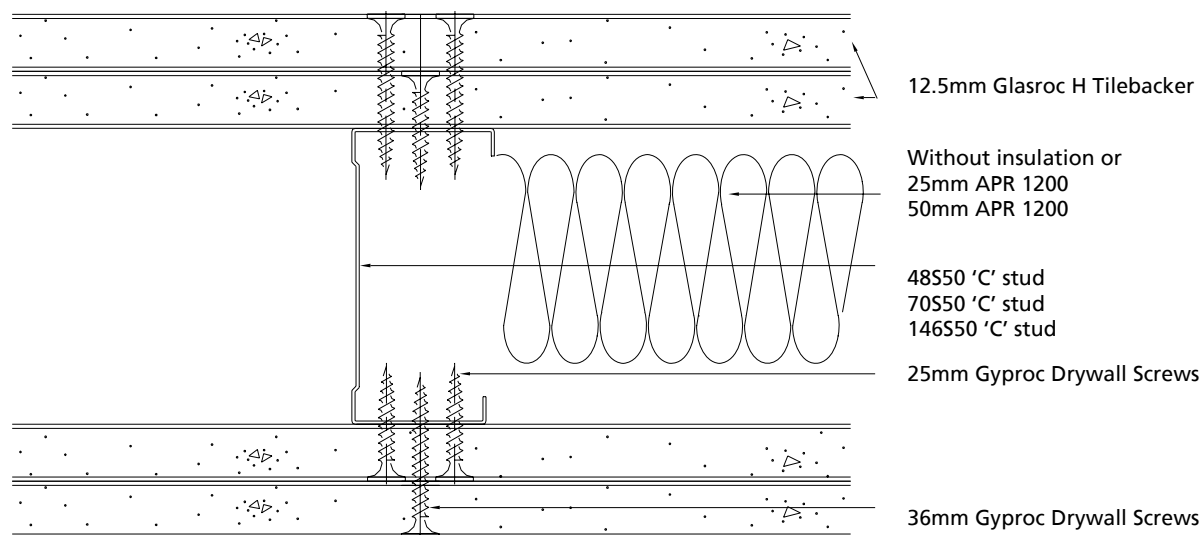
At the left-hand edge a Gypframe 48/70/146S50 'C' Stud was used to fix the partition to the test frame, using 60mm fire resistance fixings at 600mm centres.

Both the unexposed face and the exposed face of the specimen were clad with a double layer of British Gypsum 12.5mm Glasroc H Tilebacker boards. The inner layer boards were fixed with 25mm Gyproc Drywall Screws at 300mm centres around the perimeter of the boards only. The outer layer boards were fixed with 36mm Gyproc Drywall Screws at 300mm centres around the perimeter and within the field of the boards.

The cavity was either left unfilled, filled using 25mm APR 1200 or filled using 50mm APR 1200.

All vertical joints were staggered between layers, with a full board at the free edge of the exposed face. A horizontal joint was positioned at 2400mm from the base on the outer layer boards and at 600mm from the base on the inner layer boards, on both faces of the specimen. A Gypframe GFS1 fixing strap was used behind the horizontal outer layer board joint.

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.



**Figure 2 - Horizontal Cross Section**

The range of systems required to be incorporated in the above constructions is as follows:

Board Construction	Stud Section Size	Insulation
Single Layer	48S50	None and 25mm
	70S50	None, 25mm and 50mm
Double Layer	48S50	None and 25mm
	70S50	None, 25mm and 50mm
	146S50	None, 25mm and 50mm

## 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 and 0296SI for fire resistance, reaction to fire, acoustic and structural testing. The Building Test Centre is wholly owned by British Gypsum 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

A handwritten signature in blue ink, appearing to read 'P. Miller'.

**Paul Miller**  
BSc(Hons.),  
*Fire Test Manager*

Reviewing Assessor

A handwritten signature in blue ink, appearing to read 'P. Barnes'.

**Philip Barnes**  
*BTC Manager*

Assessment Date                      4<sup>th</sup> May 2011.

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



## 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 25 and 26). 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 17294F

A FIRE RESISTANCE TEST ON A GYPWALL METAL STUD PARTITION WITH 48mm STUD FRAMEWORK CLAD EACH SIDE WITH A SINGLE LAYER OF 12.5mm GLASROC H TILEBACKER EX SHERBURN LINE GRG (T1), CONDUCTED IN ACCORDANCE WITH BS EN 1364-1:1999.

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

Gypframe 50FEC50 Standard Floor & Ceiling Folded Edge Channels were fixed to the head and base of the test aperture at 600mm centres using 60mm fire resistant fixings.

Gypframe 48S50 'C' Studs were positioned at 600mm centres between the channels. 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 25mm thick rock mineral fibre gasket.

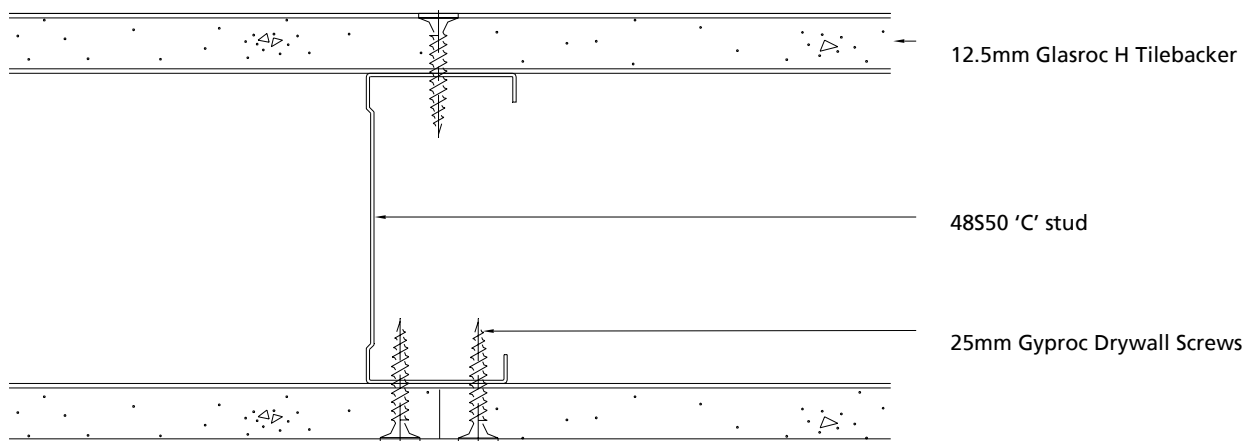
At the left-hand edge a Gypframe 48S50 'C' Stud was used to fix the partition to the test frame, using 60mm fire resistance fixings at 600mm centres.

Both the unexposed face and the exposed face of the specimen were clad with a single layer of British Gypsum 12.5mm Glasroc H Tilebacker. The boards were fixed with 25mm Gyproc Drywall Screws at 300mm 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 both faces of the specimen. A Gypframe GFS1 fixing strap was used behind the horizontal outer layer board joint.

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.

**Applicant:** British Gypsum



**Figure 3 - Horizontal Cross Section**

The tested construction achieved the following results:

Integrity	83 minutes
Insulation	51 minutes

The test was carried out in accordance with BSEN 1364-1:1999 taking into account Fire Test Study Group standard interpretations where appropriate. The test was carried out on the 28<sup>th</sup> March 2011 at the Building Test Centre, UKAS accreditation No. 0296. The test was carried out on behalf of British Gypsum.

BTC 12853F (reviewed 4<sup>th</sup> May 2011 BTC 17350FA)

A FIRE RESISTANCE TEST ON A 2.5m HIGH BRITISH GYPSUM GYPWALL PARTITION CLAD WITH A SINGLE LAYER OF 12.5mm GYPROC WALLBOARD ON GYPFRAME 48S50 'C' STUDS, 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 2500mm 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

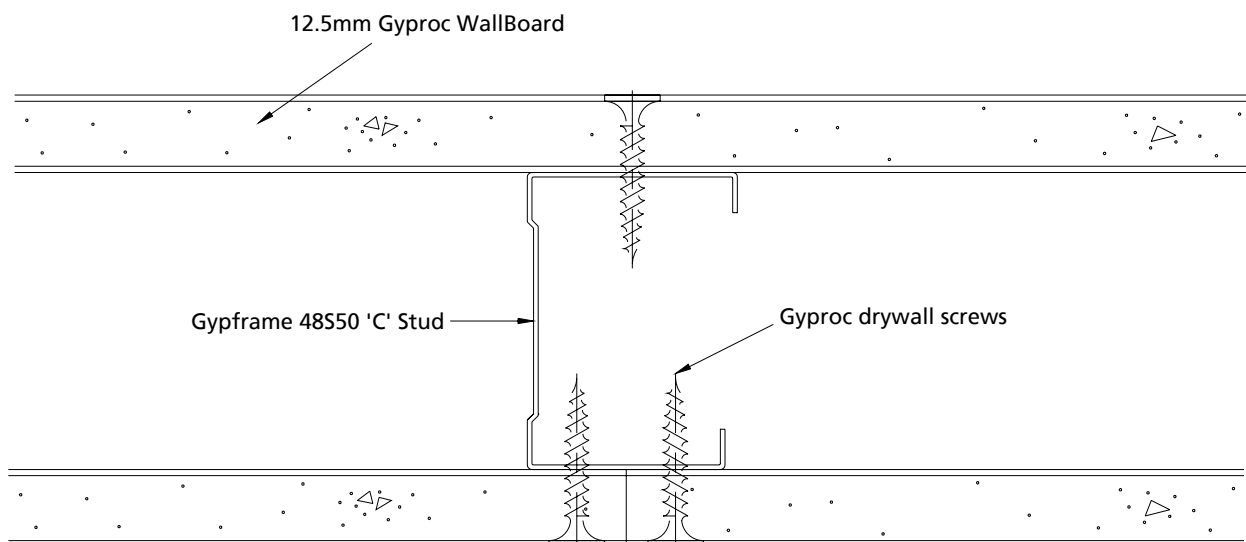
**Applicant:** British Gypsum

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 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 single layer of 12.5mm Gyproc WallBoard. The layer of boards was fixed to the frame with 25mm Gyproc drywall screws at 300mm centres around the perimeter of the board and within the field of the board. All joints were staggered between layers.

Horizontal joints were at 2400mm from the base on both sides of the partition. Gypframe GFS1 Fixing Strap was used behind the horizontal joints.

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.



**Figure 4 - Horizontal Cross Section**

**Applicant:** British Gypsum

The tested construction achieved the following results:

Integrity	32 minutes
Insulation	30 minutes

The test was carried out in accordance with BSEN 1364-1:1999 taking into account Fire Test Study Group standard interpretations where appropriate. The test was carried out on the 23<sup>rd</sup> July 2003 at the Building Test Centre, UKAS accreditation No. 0296. The test was carried out on behalf of British Gypsum.

### BTC 17295F

A FIRE RESISTANCE TEST ON A GYPWALL METAL STUD PARTITION WITH 48mm STUD FRAMEWORK CLAD EACH SIDE WITH A SINGLE LAYER OF 12.5mm GLASROC H TILEBACKER EX SHERBURN LINE GRG, WITH 25mm ISOVER APR INSULATION IN THE CAVITY (T2), CONDUCTED IN ACCORDANCE WITH BS EN 1364-1:1999.

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

Gypframe 50FEC50 Standard Floor & Ceiling Folded Edge Channels were fixed to the head and base of the test aperture at 600mm centres using 60mm fire resistant fixings.

Gypframe 48S50 'C' Studs were positioned at 600mm centres between the channels. 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 25mm thick rock mineral fibre gasket.

At the left-hand edge a Gypframe 48S50 'C' Stud was used to fix the partition to the test frame, using 60mm fire resistance fixings at 600mm centres.

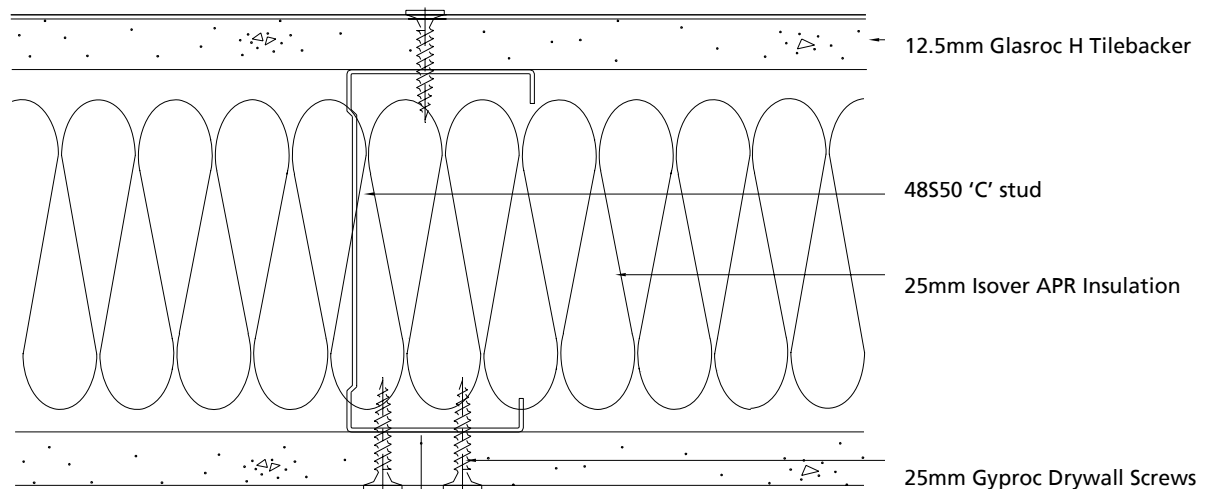
The cavity was filled with a single layer of 25mm Isover APR Insulation.

Both the unexposed face and the exposed face of the specimen were clad with a single layer of British Gypsum 12.5mm Glasroc H Tilebacker. The boards were fixed with 25mm Gyproc Drywall Screws at 300mm 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 both faces of the specimen. A Gypframe GFS1 fixing strap was used behind the horizontal outer layer board joint.

**Applicant:** British Gypsum

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



**Figure 5 - Horizontal Cross Section**

The tested construction achieved the following results:

Integrity	83 minutes
Insulation	60 minutes

The test was carried out in accordance with BSEN 1364-1:1999 taking into account Fire Test Study Group standard interpretations where appropriate. The test was carried out on the 29<sup>th</sup> March 2011 at the Building Test Centre, UKAS accreditation No. 0296. The test was carried out on behalf of British Gypsum.

### BTC 17315F

A FIRE RESISTANCE TEST ON A GYPWALL METAL STUD PARTITION WITH 70mm STUD FRAMEWORK CLAD EACH SIDE WITH A SINGLE LAYER OF 12.5mm GLASROC H TILEBACKER EX SHERBURN LINE GRG, WITH 50mm ISOVER APR INSULATION IN THE CAVITY (T3), CONDUCTED IN ACCORDANCE WITH BS EN 1364-1:1999.

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

**Applicant:** British Gypsum

Gypframe 72FEC50 Standard Floor & Ceiling Folded Edge Channels were fixed to the head and base of the test aperture at 600mm centres using 60mm fire resistant fixings.

Gypframe 70S50 'C' Studs were positioned at 600mm centres between the channels. 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 25mm thick rock mineral fibre gasket.

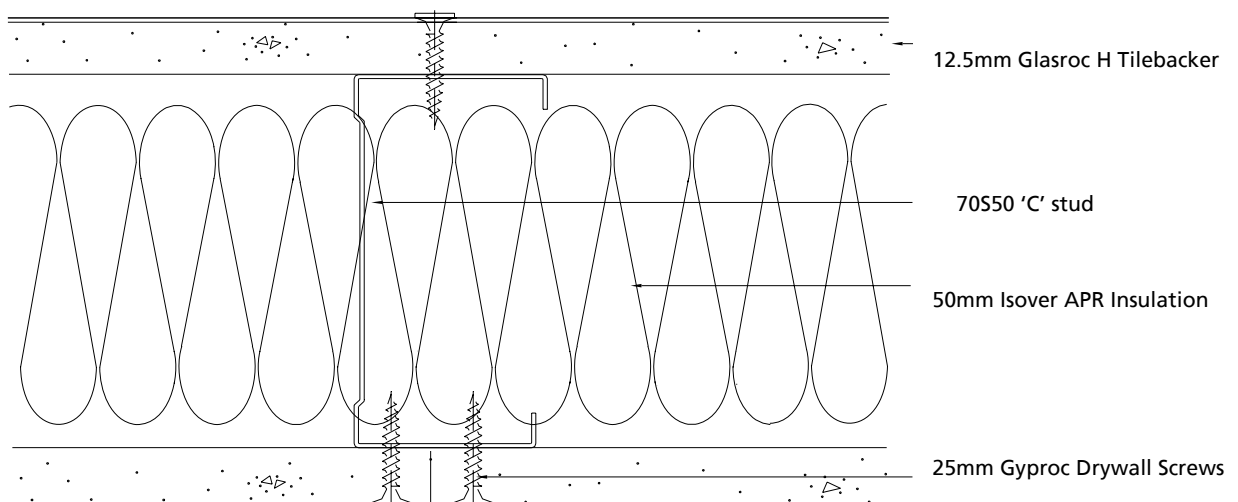
At the left-hand edge a Gypframe 70S50 'C' Stud was used to fix the partition to the test frame, using 60mm fire resistance fixings at 600mm centres.

The cavity was filled with a single layer of 50mm Isover APR Insulation.

Both the unexposed face and the exposed face of the specimen were clad with a single layer of British Gypsum 12.5mm Glasroc H Tilebacker. The boards were fixed with 25mm Gyproc Drywall Screws at 300mm 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 2400mm from the base, on both faces of the specimen. A Gypframe GFS1 fixing strap was used behind the horizontal outer layer board joint.

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.



**Figure 6 - Horizontal Cross Section**

**Applicant:** British Gypsum

The tested construction achieved the following results:

Integrity	68 minutes
Insulation	60 minutes

The test was carried out in accordance with BSEN 1364-1:1999 taking into account Fire Test Study Group standard interpretations where appropriate. The test was carried out on the 11<sup>th</sup> April 2011 at the Building Test Centre, UKAS accreditation No. 0296. The test was carried out on behalf of British Gypsum.

BTC 12828F (reviewed 4<sup>th</sup> May 2011 BTC 17348FA)

A FIRE RESISTANCE TEST ON A BRITISH GYPSUM GYPWALL PARTITION CLAD WITH A SINGLE LAYER OF 12.5mm GYPROC WALLBOARD ON GYPFRAME 70S50 'C' STUDS WITH 50mm ISOWOOL IN THE CAVITY, 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.

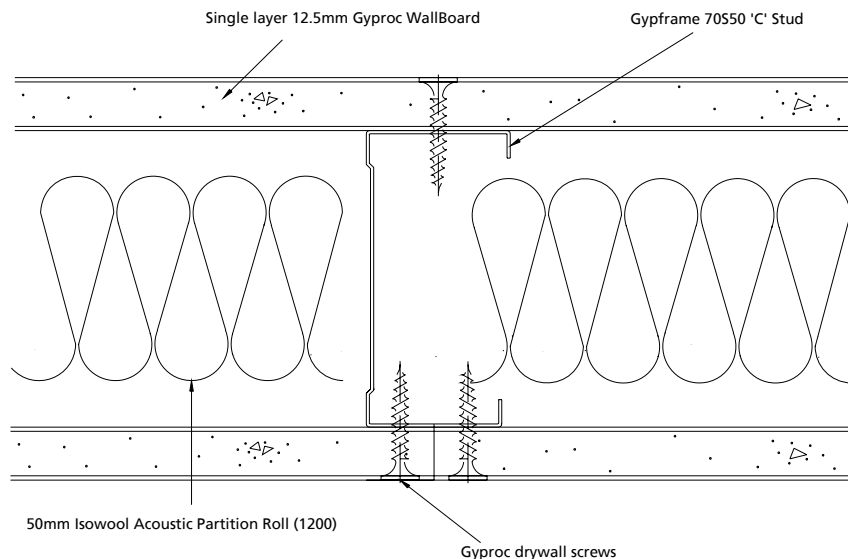
The framework was lined both sides with a single layer of 12.5mm Gyproc WallBoard. The layer of boards was fixed to the frame with 25mm Gyproc drywall screws at 300mm centres around the perimeter of the board and within the field of the board. All joints were staggered between layers.

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

Horizontal joints were at 2700mm from the base on both sides of the partition. Gypframe GFS1 Fixing Strap was used behind the horizontal joints.

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.

**Applicant:** British Gypsum



**Figure 7 - Horizontal Cross Section**

The tested construction achieved the following results:

Integrity	35 minutes
Insulation	32 minutes

The test was carried out in accordance with BSEN 1364-1:1999 taking into account Fire Test Study Group standard interpretations where appropriate. The test was carried out on the 16<sup>th</sup> July 2003 at the Building Test Centre, UKAS accreditation No. 0296. The test was carried out on behalf of British Gypsum.

### BTC 17339F

A FIRE RESISTANCE TEST ON A GYPWALL METAL STUD PARTITION WITH 48mm STUD FRAMEWORK CLAD EACH SIDE WITH A DOUBLE LAYER OF 12.5mm GLASROC H TILEBACKER EX SHERBURN LINE GRG, (T5), CONDUCTED IN ACCORDANCE WITH BS 476: PART 22: 1987, CLAUSE 5.

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

**Applicant:** British Gypsum



Gypframe 50FEC50 Folded Edge Floor & Ceiling Channels were fixed to the head and base of the test aperture at 600mm centres using 60mm fire resistant fixings.

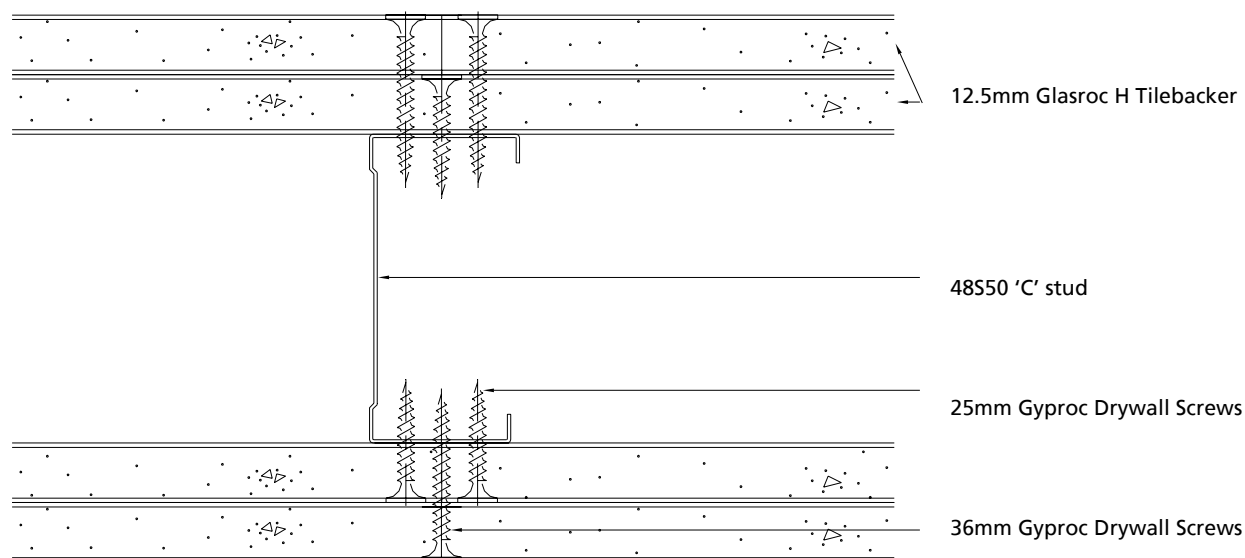
Gypframe 48S50 'C' Studs were positioned at 600mm centres between the channels. The right-hand stud viewed from the unexposed face was not fixed to the perimeter of the test frame, and the gap between the stud and the frame lining was filled with a 25mm thick rock mineral fibre gasket.

At the left-hand edge a Gypframe 48S50 'C' Stud was used to fix the partition to the test frame, using 60mm fire resistance fixings at 600mm centres.

Both the unexposed face and the exposed face of the specimen were clad with a double layer of British Gypsum 12.5mm Glasroc H Tilebacker boards. The inner layer boards were fixed with 25mm Gyproc Drywall Screws at 300mm centres around the perimeter of the boards only. The outer layer boards were fixed with 36mm Gyproc Drywall Screws at 300mm 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 edge of the exposed face. A horizontal joint was positioned at 2400mm from the base on the outer layer boards and at 600mm from the base on the inner layer boards, on both faces of the specimen. A Gypframe GFS1 fixing strap was used behind the horizontal outer layer board joint.

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.



**Figure 8 - Horizontal Cross Section**

The tested construction achieved the following results:

Integrity	122 minutes
Insulation	115 minutes

The test was carried out in accordance with BS 476: Part 22: 1987, Clause 5 taking into account Fire Test Study Group standard interpretations where appropriate. The test was carried out on the 26<sup>th</sup> April 2011 at the Building Test Centre, UKAS accreditation No. 0296. The test was carried out on behalf of British Gypsum.

BTC 1973F (reviewed 4<sup>th</sup> May 2011 BTC 17349FA)

A FIRE RESISTANCE TEST ON A GYPWALL METAL STUD PARTITION WITH 48mm STUD FRAMEWORK CLAD EACH SIDE WITH A DOUBLE LAYER OF 12.5mm GYPROC WALLBOARD, CONDUCTED IN ACCORDANCE WITH BS 476: PART 22: 1987, CLAUSE 5.

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

Gypframe 50C50 Floor & Ceiling Channels were fixed to the head and base of the test aperture at 600mm centres using 60mm fire resistant fixings.

**Applicant:** British Gypsum

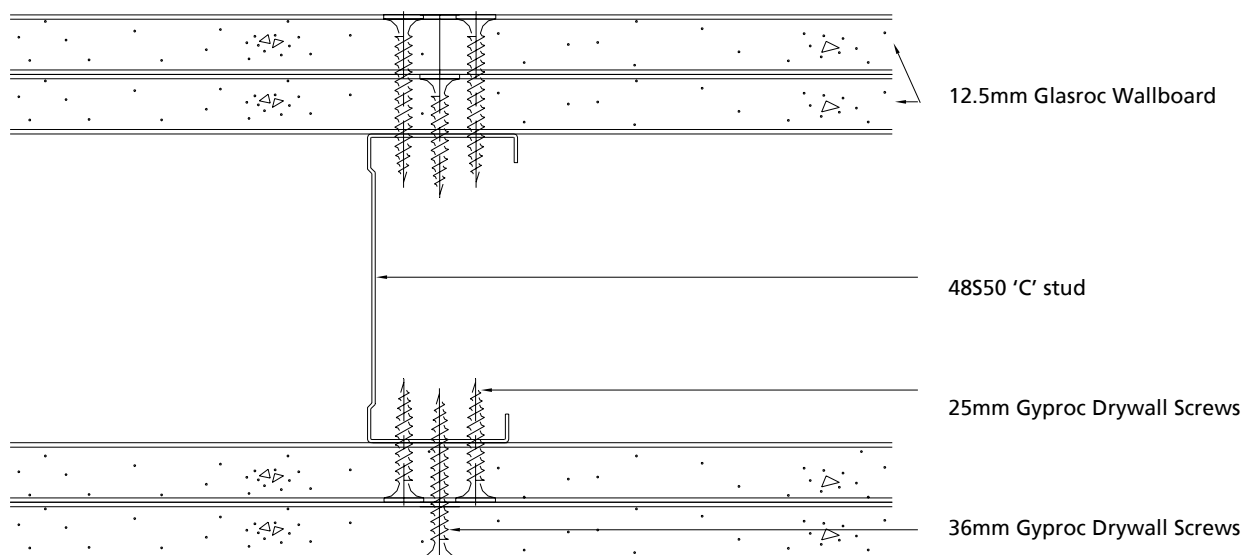
Gypframe 48S50 'C' Studs were positioned at 600mm centres between the channels. The right-hand stud viewed from the unexposed face was not fixed to the perimeter of the test frame, and the gap between the stud and the frame lining was filled with a 25mm thick rock mineral fibre gasket.

At the left-hand edge a Gypframe 48S50 'C' Stud was used to fix the partition to the test frame, using 60mm fire resistance fixings at 600mm centres.

Both the unexposed face and the exposed face of the specimen were clad with a double layer of British Gypsum 12.5mm Gyproc Wallboard. The inner layer boards were fixed with 25mm Gyproc Drywall Screws at 300mm centres around the perimeter of the boards only. The outer layer boards were fixed with 36mm Gyproc Drywall Screws at 300mm 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 edge of the exposed face. A horizontal joint was positioned at 2400mm from the base on the outer layer boards and at 600mm from the base on the inner layer boards, on both faces of the specimen. A Gypframe GFS1 fixing strap was used behind the horizontal outer layer board joint.

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.



**Figure 9 - Horizontal Cross Section**

**Applicant:** British Gypsum

The tested construction achieved the following results:

Integrity	75 minutes
Insulation	66 minutes

The test was carried out in accordance with BS 476: Part 22: 1987, Clause 5 taking into account Fire Test Study Group standard interpretations where appropriate. The test was carried out on the 9<sup>th</sup> October 1995 at the Building Test Centre, UKAS accreditation No. 0296. The test was carried out on behalf of British Gypsum.

## DISCUSSION

With non-loadbearing lightweight steel stud constructions, the duration of fire performance is governed by the level of protection offered by the exposed face and unexposed face linings and the support provided to these linings by the steel framework and fixings.

The construction described under DETAILS OF THE REQUEST varies from the current substantiated classic range and are detailed in the table below:

	Requested construction	Tested construction
1. Boards	12.5mm Glasroc H	12.5mm Gyproc WallBoard

## Boards

The performance of 12.5mm Glasroc H can be compared directly to 12.5mm Gyproc WallBoard when tested to BSEN 1364-1:1999 using BTC 17294F and BTC 12853F, BTC 17315F and BTC 12828F. When tested to BS 476: Part 22: 1987, Clause 5 the performance can be compared using BTC 17339F and BTC 1973F see tables below.

Comparison using a single layer board on 48mm Studs (EN)		BTC 17294F Glasroc H	BTC 12853F Gyproc WallBoard
1. Insulation Performance (minutes)		51	30
2. Integrity Performance (minutes)		83	32
3. First Board Fall (minutes)		None (TT at 84 minutes)	20
4. Protection to Stud (°C)	Max temp. at 15 min	125	130
	Max temp. at 30 min	485	835

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Comparison using a single layer board on 70mm Studs with 50mm insulation (EN)		BTC 17315F Glasroc H	BTC 12828F Gyproc WallBoard
1. Insulation Performance (minutes)		60	32
2. Integrity Performance (minutes)		68	35
3. First Board Fall (minutes)		66	18
4. Protection to Stud (°C)	Max temp. at 15 min	129	123
	Max temp. at 30 min	615	841

Comparison using a double layer board on 48mm Studs (BS)		BTC 17339F Glasroc H	BTC 1973F Gyproc WallBoard
1. Insulation Performance (minutes)		115	66
2. Integrity Performance (minutes)		122	75
3. First Board Fall (minutes)		90	30
4. Protection to Stud (°C)	Max temp. at 15 min	95	-
	Max temp. at 30 min	110	-
	Max temp. at 60 min	389	-

- indicates data not available

From the comparison above it is reasonable to assume that the insulation, integrity and protection to the stud provided by 12.5mm Glasroc H is at least as good as 12.5mm Gyproc WallBoard.

### 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 BS476: Part 22:1987 Clause 5 or BS EN 1364-1:1999, they would provide the following periods of fire resistance:

The table below is a summary of the current claims for Gyproc WallBoard (taken from the White Book 11<sup>th</sup> Edition)

Board Construction	Stud Section Size	Insulation	Maximum Height	BS / EN	Insulation / Integrity Performance
Single Layer	48S50	None	2500	BS & EN	30
	48S50	25mm	2500	BS & EN	30
	70S50	None	3600	BS & EN	30
	70S50	25mm	3600	BS & EN	30
	70S50	50mm	3600	BS & EN	30
Double Layer	48S50	None	3400	BS & EN	30
	48S50	25mm	3000	EN	30
	48S50	25mm	3400	BS	60
	70S50	None	4600	EN	30
	70S50	None	4600	BS	60
	70S50	25mm	4600	EN	30
	70S50	25mm	4600	BS	60
	70S50	50mm	4600	EN	30
	70S50	50mm	4000	EN	60
	70S50	50mm	4600	BS	60
	146S50	None	7600	EN	30
	146S50	None	7600	BS	60
	146S50	25mm	7600	EN	30
	146S50	25mm	7600	BS	60
	146S50	50mm	7600	EN	30
	146S50	50mm	4000	EN	60
	146S50	50mm	7600	BS	60

**Applicant:** British Gypsum

Based on the aforementioned, it is our opinion that Glasroc H will offer the same level of fire resistance performance as Gyproc WallBoard. Therefore, any British Gypsum non loadbearing partition system which has been subjected to a fire resistance test in accordance with BS476: Part 22 or BS EN 1364-1:1999 that features British Gypsum's Gyproc WallBoard can have the board component switched to Glasroc H with no detrimental effect on the systems fire resistant performance. This is provided that other system parameters, stud size, stud centres, fixing centres, board dimensions and quilt specification remain unchanged.

## **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.



## 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: .....Print Name ...ADAM RICHARDSON..

For and behalf of British Gypsum.

## AUTHORITY FOR USE OF TEST EVIDENCE

Test Report Numbers: BTC 17294F, BTC 17295F, BTC 17315F, BTC 17339F, BTC 12853F, BTC 12828F, BTC 1973F

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

It is required to compare the board performance of 12.5mm Glasroc H to 12.5mm Gyproc WallBoard to assess the following constructions for fire resistance performance if tested in accordance with BS476: Part 22:1987 Clause 5 and BS EN 1364-1:1999.

Assessment client: British Gypsum

Signed:  ..... Print Name .....ADAM RICHARDSON

Job Title: PROJECT LEADER

Department: . TECHNICAL

For and behalf of **British Gypsum**

**Applicant:** British Gypsum