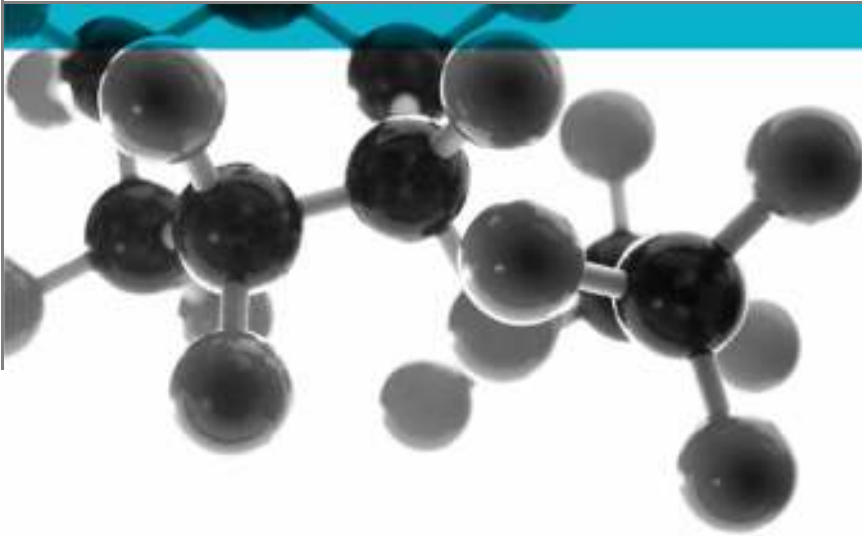




STS202

Issue 7: April 2016



Test of: GypWall QUIET IWL

Burglary resistance requirements for construction products including doorsets, windows, curtain walling, security grilles, garage doors and roller shutters.

A Report To:
British Gypsum Ltd
East Leake, Loughborough, Leicestershire. LE12 6HX

Document Reference:
WIL 402385

Date: 06/09/2018

Copy: 1

Issue No.: 1

Page 1

Testing
Advising
Assuring

TEST CONCLUSIONS

Samples of:
Manufacturer British Gypsum Ltd
Product Wall
Model GypWall QUIET IWL

have been tested in accordance with: STS 202 Issue 7: April 2016.
By Exova Wednesbury, a UKAS accredited Testing Laboratory (No. 0621)

At Unit 3 Wednesbury One, Black Country New Road, Wednesbury, WS10 7NZ.
Results and comments as detailed below:

Clause No.	Description	Compliance
5	Resistance Class – BR1	Yes
6	Test requirements and procedures	Yes
9	Requirements for hardware	N/A
11	Labelling and Conformity	NT
12	Installation instructions	NT

Testing carried out outside the scope of UKAS approval
No inferences can be made regarding performance against other requirements of this standard

Tests marked “ N/A ” are not applicable to the sample under test.
Tests marked “N/T” were not applied to the sample under test

AUTHORISATION

Tests performed by: Brett Devey, Trainee Test Engineer
Macauley Buchan, Trainee Test Engineer

Report issued by: Mark West, Door & Window Laboratory Manager

Signed 

Date 5th September 2018

For and on behalf of Exova (UK) Ltd

Report authorised by: Chris Bryan, Senior Test Engineer

Signed 

Date 5th September 2018

For and on behalf of Exova (UK) Ltd

Report issued: 06 September 2018

NOTE.

These tests are not covered by the Laboratory UKAS accreditation schedule.

Tests marked NT were not tested

Tests marked NA are not applicable to the product on test.

The laboratory has tested the product supplied by the client as sampled in accordance with their own requirements

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TEST DETAILS

CLIENT DETAILS

Company name British Gypsum Ltd
Address East Leake
Loughborough
Leicestershire
LE12 6HX

Contact Paul French

ORDER DETAILS

Order number 4501792741
Dated 23/07/18

SAMPLE DETAILS

Walls dimensions 2400 x 1995 x 225 mm
Configuration 15mm Gyproc SoundBloc F outer layer (Outer),
12.5mm Gyproc Habito inner layer (Inner).
twin Gypframe 60 I 70 I studs @ 600mm centres
50mm Acoustic Partition Roll (APR1200)
Fixings 300mm centres (inner layer 25mm British Gypsum High Performance
Screws, Outer layer 41mm British Gypsum Jack-Point Screws)

Joints 4 joints, with Gyproc Joint Tape and Gyproc Easi-Fill 45.

TEST DETAILS

Test specification STS 202 Issue 7: April 2016
Full test Yes
Test to clauses All

Sample received 12/07/2018
Test started 13/07/2018
Test completed 13/07/2018

Special Test requirements None
Other reports to be used in conjunction with this report None

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Author:	M West	Issue Date:	06/09/2018
Client:	British Gypsum Ltd	Issue No.:	1

TEST PROCEDURE

Introduction	<p>This test report should be read in conjunction with the technical schedule STS 202 Issue 7: April 2016 Burglary resistance requirements for construction products including doorsets, windows, curtain walling, security grilles, garage doors and roller shutters.</p> <p>The specimens were judged on their ability to comply with the performance criteria as required in STS202.</p>
Instruction To Test	<p>Initial requirement was for a burglar resistance level BR1.</p>
Test Specimen Construction	<p>A description of the test construction is given in the Schedule of Components. The description is based on a detailed survey of the specimens and information supplied by the sponsor of the test.</p>
Installation	<p>The sample was supplied mounted within a timber sub-frame of nominal section fitted flush with the exterior face, in accordance with the clients fitting instructions.</p> <p>Mr Paul French, a representative of British Gypsum Ltd witnessed the test.</p>
Sampling	<p>The samples were not independently witnessed or selected and were provided direct from the test sponsor.</p>
Test Climate	<p>The sample was conditioned in the laboratory in the range 15-30 °C and 25-75% humidity.</p> <p>The temperature and humidity in the lab was maintained in the range 23.1-29.9°C and 32.2-51.5% humidity for the duration of the test.</p>

INITIAL OBSERVATIONS

**The internal face
of the sample**

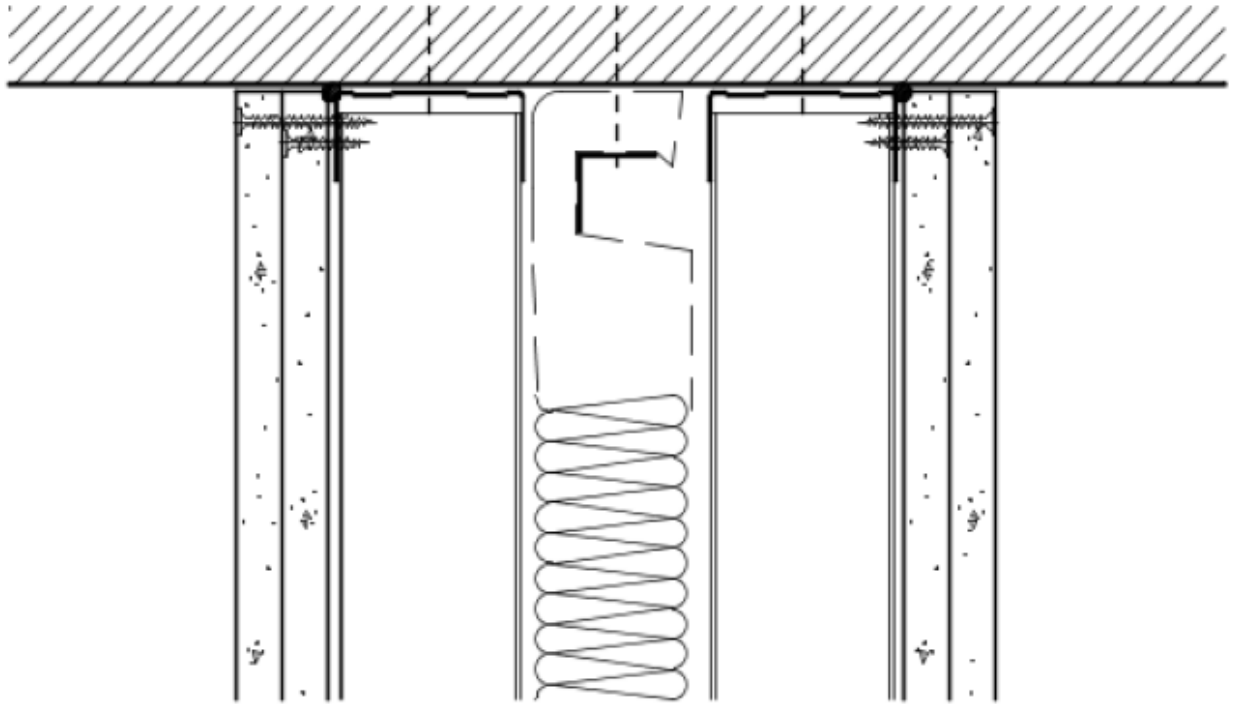


**The external face
of the sample**



TEST SPECIMEN

Figure 1- Vertical Elevation of Test Specimen (External Face)



Do not scale. All dimensions are in mm

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Author: M West

Issue Date: 06/09/2018

Client: British Gypsum Ltd

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SCHEDULE OF COMPONENTS

(Refer to Figures 1 to 3)
 (All values are nominal unless stated otherwise)
 (All other details are as stated by the sponsor)

Variants

None

<u>Item</u>	<u>Description</u>
Gypframe 60 70 Stud	: Metal frame "I" studs installed vertically at 600mm centres in twin rows to provide framing
Gypframe 62 FEC 50 Channel	: Metal channel fixed to create top and bottom of opening framework
12.5mm Gyproc Habito	: Plasterboard installed as inner layer to both sides of the partition
15mm Gyproc SoundBloc F	: Plasterboard installed as outer layer to both sides of the partition
25mm British Gypsum High Performance	: Used to fix Gyproc Habito to Gypframe framing screws
41mm British Gypsum Jack-Point Screws	: Used to fix Gyproc SoundBloc F to Gypframe framing through Gyproc Habito inner layer
50mm Isover Acoustic Partition Roll	: Glass mineral wool insulation roll installed with (APR1200) Gypframe framing
Gyproc Sealant	: Silicone-based sealant installed around the framing perimeter for acoustic performance

PERFORMANCE CRITERIA & TEST RESULTS

Clause	Requirement	Result	Pass/fail
4. General Requirements			
4.1	The client shall supply detailed information about the product to be tested.	Information supplied by the client prior to testing.	Pass
4.2	The size and range of products shall be agreed in advance.	Product range and sized agreed by the client.	Pass
4.3	The test samples shall be fully functioning, and be fitted to the subframe in accordance with the manufacturers' installation instructions.	Samples fitted in accordance with manufacturer's installation instructions.	Pass
4.4	The attack face and required burglar resistance rating shall be agreed with the client.	Attack face was defined as the external face. Initial requirement was for a rating of BR1.	Pass
4.5	An agreed number of samples shall be supplied.	1no. test samples supplied.	Pass
6.6	The sample shall be checked for damage prior to testing and any damage recorded.	Sample undamaged prior to testing.	Pass
	The sample shall be closed and locked, and tested in the most secure position.	Specimen had no opening elements.	N/a
6.7 Pre test	Every conceivable combination of tool and attack method shall be used to identify the most productive method of attack for the sample.		
BR1 Tool kit 1 Resistance time 1 min	Attacks were made using the knife to try and stab through the plasterboard and allow entry to be gained. Considerable damage was created to the external layer but not enough for entry to be gained. Total attack time was 1 minute. Entry not achieved.		PASS BR1
	Attacks were made using the knife to try and score through the plasterboard. Considerable damage was made to the external layer but not enough to create a hole. Total attack time was 3 minutes. Entry not achieved.		
	Attacks were made using the nail bar to try and hack through the plasterboard in a downward motion, in an attempt to gain entry. A considerable hole was made to the external layer and it proved to be one of the more successful attacks. Total attack time was 1 minutes. Entry not achieved.		

Clause	Requirement	Result	Pass/fail
	<p>Attacks were made using the nail bar to try and hack a vertical line through the plasterboard, in order to weaken the wall. Attacks were then made using the heel of the foot to kick through the weakened section of wall and allow entry to be gained but to no avail. Total attack time was 1 minute. Entry not achieved.</p> <p>Attacks were made using the nail bar to hack a vertical line down the wall to which the nail bar could then be inserted to try and lever away some of the plasterboard. Once enough space had been created the plasterboard was then gripped and pulled away using the hands. Final attacks were made using the heel of the foot to kick through the weakened plasterboard but entry was not able to be achieved. Total attack time was 1 minute. Entry not achieved.</p> <p>Attacks were made using the knife to try and score a large square into the plasterboard to try and weaken it considerably and allow it to be better kicked through. Once the square was scored attacks were made using the heel of the foot to kick through the plasterboard. The external layer of the plasterboard went through but time expired before further attacks could be considered. Total attack time was 1 minute. Entry not achieved.</p> <p>Attacks were made to the meeting style in the centre of the wall in the hope that the internal stud could be used as a lever point for the nail bar. The nail bar was hacked through the external plasterboard but the stud offered no extra leverage meaning entry could not be gained. Total attack time was 1 minute. Entry not achieved.</p>		
6.10 Main test	<p>The burglar resistance attack method used by the test team during the main test shall be the one most likely to gain entry in their opinion, as determined during the pre-test.</p> <p>No vulnerability was identified therefor no main test was carried out.</p>		
9 Requirements for hardware	Any locking cylinders should meet the requirements of a one star rating to TS007, including the general vulnerability of the cylinder, if applicable.	Not applicable, no cylinder fitted.	N/A
11 Labelling and Conformity	<p>The product should be fitted with a tamper evident identification label.</p> <p>The label should be fitted so it is visible when the sample is open but not necessarily when closed.</p>	<p>Pre certification prototype only. No labels supplied as yet. Customer advised of labelling requirements for production.</p> <p>Pre certification prototype only. No labels supplied as yet. Customer advised of labelling requirements for production.</p>	N/A

Clause	Requirement	Result	Pass/fail
	<p>The label shall include the following information:-</p> <p>The WCL Mark or Certisecure logo The certificate number A unique serial number Optionally certificate holders name The technical specification number (STS202) The security classification (BR1)</p>	<p>Pre certification prototype only. No labels supplied as yet. Customer advised of labelling requirements for production.</p>	N/A
12 Installation instructions	<p>The product shall be supplied with full installation instructions.</p>	<p>Pre certification prototype only. Customer advised of installation instruction requirements for production.</p>	N/A

CONCLUSIONS

Evaluation against objective The sample as provided by the client was subjected to burglar resistance testing in accordance with STS 202: Issue 7: April 2016 and achieved the requirements for a burglar resistance level of BR1.

Observations & comments

LIMITATIONS

Limitations The results relate only to the behaviour of the specimens of the element of construction under the particular conditions of test. They are not intended to be the sole criteria for assessing the potential performance of the element in use, nor do they reflect the actual behaviour in use.

Range of assemblies covered by this report It is our opinion that the range of wall assemblies covered by this report are limited to the following

- Assemblies with thickness and configurations of at least those specified such that the overall partition depth to the outside of the external face is no less than 200mm.
- Wall assemblies formed with stud centres of not more than 600mm and all vertical board joints located to coincide with a metal stud position.

Uncertainty of Measurement The uncertainties of measurements calculated for a confidence level of 95% throughout these tests are within the limits of these tolerances.

The standard specifies the following tolerances

- Forces: $\pm 2\%$
 - Distances: $\pm 1\text{mm}$ for tape measures $\pm 0.01\text{mm}$ for dial gauges
 - Times: $\pm 5\text{s}$
-

REVISION HISTORY

This issue of the report replaces all previous issues that are now withdrawn.

Issue No :	Re - Issue Date :
Revised By:	Approved By:
Reason for Revision:	

END OF REPORT