



## LETTER OF CONFORMITY

### *SOUND INSULATION ESTIMATES FOR BRITISH GYPSUM SHAFTWALL SYSTEMS*

#### SYSTEM DESCRIPTIONS

**British Gypsum ShaftWall incorporating 1/2/3 layers of 15mm Glasroc F FIRECASE on the corridor side and 20mm Glasroc F FIRECASE on the shaft side, with and without 25mm Isover Acoustic Partition Roll (1200) in the cavity.**

**System 1:** British Gypsum ShaftWall on Gypframe 60I70 I Stud framework.

**System 2:** British Gypsum ShaftWall on Gypframe 70I70 I Stud framework.

**System 3:** British Gypsum ShaftWall on Gypframe 92I90 I Stud framework.

**System 4:** British Gypsum ShaftWall on Gypframe 146TI90 I Stud framework.

The exact systems described above have not been subjected to a laboratory acoustic test in accordance with BS EN 140-3:1995.

Substantiation is based mainly on test reports comparing BTC 13465A, which shows a similar British Gypsum ShaftWall construction on Gypframe 146TI90 Tabbed I Studs to BTC 16804A and BTC 16862A.

These systems achieved the following acoustic performances:

BTC 13465A	Rw	49dB	- FireLine and CoreBoard construction.
BTC 16804A	Rw	48dB	- Glasroc F FIRECASE construction.
BTC 16862A	Rw	48dB	- Glasroc F FIRECASE construction. (Repeat of BTC 16804A)

By comparing the laboratory acoustic test results for the above systems, the difference in performance can be determined. Assuming this difference in performance is constant, it can be applied to all systems detailed in the SYSTEM DESCRIPTIONS to give acoustic ratings for British Gypsum ShaftWall systems incorporating Glasroc F FIRECASE.

Reference is also made to a large body of acoustic test data that enables us to form an opinion that the specifications detailed within the SYSTEM DESCRIPTIONS above are capable of achieving the following performances.



## RESULTS

	1 x 15mm Glasroc F FIRECASE		2 x 15mm Glasroc F FIRECASE		3 x 15mm Glasroc F FIRECASE	
	without insulation	with insulation	without insulation	with insulation	without insulation	with insulation
System 1 60I70 I Stud	38	41	41	44	42	44
System 2 70I70 I Stud	38	41	41	44	42	44
System 3 92I90 I Stud	39	42	43	45	44	45
System 4 146TI90 I Stud	42	45	47	49	48	49

If tested we would expect to achieve an  $R_w$  figure within one or two decibels of the estimated figure.

## LIMITATIONS

This letter is issued on the basis of information to hand at the time of issue. If contradictory evidence becomes available to the test house then the letter will be unconditionally withdrawn. Similarly, the letter is invalidated if the proposed construction is subsequently tested since the actual test data is deemed to take precedence over an expressed opinion. The opinions and interpretations expressed in this letter are outside the scope of UKAS accreditation.

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