



Our ref: FCO-2909/4101

Obeco Blass Blocks Pty Limited  
823 Botany Road  
Rosebery NSW 2018

Attention Mr Robert Hawke,

GLASS BLOCK FLOOR SYSTEM  
Assessment Number FCO-2909  
Your e-mail of 25 May 2011

#### INTRODUCTION

We have examined the information referenced by you on the performance of your glass-block floor system if tested to AS 1530.4-2005. The information included:-

- test report numbered RS98-050 for a fire-resistance test conducted at the Scientific and Technical Centre for Building (CSTB), France on 26 August 1998; and
- AS 1530.4-2005.

We have retained these documents and information.

#### ANALYSIS

On 26 August 1998 CSTB conducted a fire-resistance test on a glass-block floor designated 'Glass Brick Floor 19/19/10' comprising 190-mm x 190-mm x 100-mm glass blocks made up in modules 2100-mm x 1386-mm x 100-mm.

The reinforcement for the modules comprised 10-mm and 8-mm diameter bottom steel and 8-mm and 6-mm diameter top steel with 20-mm cover as detailed in the attached drawing. The glass blocks were assembled using SECAR 71 based mortar and fireclay with 30-mm between adjoining blocks.

The modules were joined using trapezoidal tongue and groove joints and all joints were sealed using PENSIL 300 mastic. A load of 250 kg/m<sup>2</sup> was applied to the floor for the 95 minute duration of the test

The floor system was heated from below as specified in AS 1530.4 and the time-temperature curve to which it was exposed was equivalent to that specified in AS 1530.4. It was essentially a non-insulation system and as such the determination of integrity is through the formation of gaps in excess of 25-mm or 6-mm x 150-mm. The use of the cotton pad would not have been applicable.

Due to the date of the test, it was conducted in accordance with specifications detailed by the Ministry of the Interior. The detailed instrumentation is compatible with AS 1530.4 and the only significant deviation from that standard was a slightly lower furnace pressure of 10 Pa. due to the impermeable nature of the specimen and the observed behaviour it is not considered that this deviation would have had a significant effect on the performance.

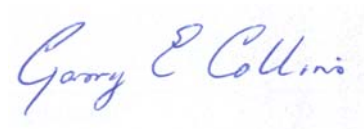
#### OPINION/CONCLUSION

Based on the test data and the factors discussed above, it is the opinion of this Division that the glass-block floor system as detailed and reported in CSTB report numbered RS98-050 would be capable of achieving fire-resistance levels (FRL) of 90/90/0 if tested in accordance with AS 1530.4-2005 with a superimposed load no greater than 250 kg/m<sup>2</sup>.

#### TERM OF VALIDITY

This assessment report will lapse on 31 March 2017. Should you wish us to re-examine this assessment with a view to the possible extension of its term of validity, would you please apply to us three to four months before the date of expiry. This Division reserves the right at any time to amend or withdraw this report in the light of new knowledge.

Yours faithfully,

A handwritten signature in blue ink that reads "Garry E Collins". The signature is written in a cursive style and is positioned above a faint, circular stamp.

Garry E Collins  
Manager, Fire Testing and Assessments.

21 October 2010

