

# Fire Test Report



PSB Singapore

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EASTW Engineering Pte Ltd.  
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Your reference / letter of	Our reference / name	Tel. extension / e-mail	Fax extension	Date	Page
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**Fire resistance test on a non-loadbearing solid core wall panel system with stiffener column conducted on 28 Aug 2015**

With regards to the above mentioned test, the nominally 155mm thick wall with an overall size of 3000mm (wide) x 2800mm (high), satisfied requirement of BS 476 Part 22: 1987 for the periods stated below:

Integrity : 260 minutes  
Insulation : 175 minutes

The wall was constructed with 145mm thick solid core panels and both sides of the wall facing were skim coated to a nominal thickness of 5mm. A stiffener column of 150mm wide x 150mm wall depth was vertically erected towards the east end of the wall.

Please do contact me via telephone (office) or alternatively you may email me if you need any clarifications.

Regards

Yours faithfully,

  
Ismail Bin Hassan  
Engineer  
Fire Property  
Mechanical

Please note that the Fire Property is located at:  
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## Summary of Fire Resistance

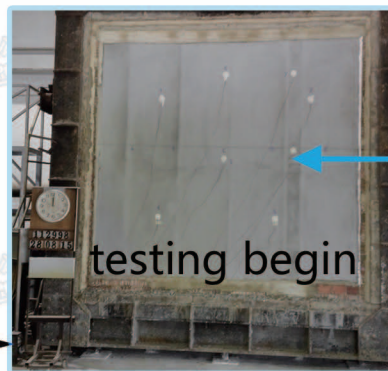
Thickines	Panel	Achieves
90mm	Hollow	2 Hours
100mm	Solid	2 Hours
150mm	Solid	4 Hours

# Fire Resistance Test

EASTW panel has inorganic non-combustible materials and have absolute incombustibility. Therefore the materials are not fire hazardous.

Good Fire Resistance

GGBS LIGHTWEIGHT  
STIFFENER WITH  
150MM PANEL FULL  
SYSTEM TESTING



GGBS LIGHTWEIGHT  
STIFFENER WITH  
100MM PANEL FULL  
SYSTEM TESTING



GGBS 90MM  
LIGHTWEIGHT  
HOLLOW PANEL  
TESTING



**Table 1: Comparison of area under the curve**

Time (min)	Temperature rise (°C)		Area under curve (°C min)		Percentage difference (%)	Standard tolerance ±%
	Standard	Furnace	Standard	Furnace		
5.0	556.4	548.2	2188.1	2075.7	-5.1	15.0
10.0	658.4	656.7	5402.7	5267.9	-2.5	
15.0	718.6	718.6	3602.0	3599.1	-0.1	10.0
30.0	821.8	823.3	15692.7	15694.3	0.0	
35.0	844.8	843.1	4317.9	4312.0	-0.1	0.5
60.0	925.3	925.4	27284.1	27249.4	-0.1	
120.0	1029.0	1024.9	88071.3	87921.6	-0.1	

**Figure 1: Furnace Temperature**

