

Test Report No. S08MEC04163/3/LGJ  
dated 25 Jul 2008



PSB Singapore

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SUBJECT:

Non-combustibility test on "ZINCALUME®" Steel material submitted by BlueScope Lysaght (Singapore) Pte Ltd on 03 Jul 2008.

TESTED FOR:

BlueScope Lysaght (Singapore) Pte Ltd  
NO. 18 Benoi Sector  
Jurong Town  
Singapore 629851

Attn: Mr Vinson Lai

DATE OF TEST:

15 & 16 Jul 2008

PURPOSE OF TEST:

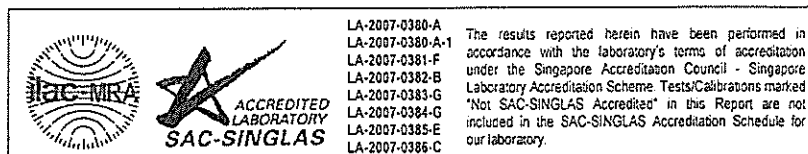
To determine whether the material is non-combustible when it is exposed to the conditions of the test specified in British Standard 476: Part 4: 1970 "Fire Test on Building Materials and Structures - Non-combustibility Test for Materials".  
The test was conducted at TÜV SÜD PSB fire test laboratory located at No. 10 Tuas Avenue 10, Singapore 639134.



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TUV®





DESCRIPTION OF SAMPLES:

672 pieces of sample, said to be "ZINCALUME<sup>®</sup>" (0.47mm thick) Steel material coated with zinc / aluminium alloy coating comprising of 55% aluminium, 43.5% zinc and 1.5% silicon, each of nominal size of 40mm x 40mm were received. 6 blocks of specimen, each of nominal test size of 40mm x 40mm x 50mm thickness were prepared. The bulk density of the sample was found to be about 6919 kg/m<sup>3</sup>.

TEST PROCEDURE:


Specimens were exposed to the specified heating conditions (750 ± 10°C) in a furnace conforming to Clause 6 and illustrated in Figure 1, 2 and 3 of the Standard. The furnace was heated and its temperature stabilized at 750 ± 10°C for more than 10 minutes. One specimen was then inserted in the furnace, the whole operation was performed in less than 5 seconds. The temperature of the specimens and the furnace were measured by two separate Chromel/Alumel thermocouples continuously for 20 minutes on the chart of a recorder. The flaming time of the specimen was determined by a stop watch. The procedure was repeated twice for two other specimens, one at each time.

RESULTS:

Description	Specimen 1	Specimen 2	Specimen 3	Requirements
Time of continuous flaming (sec.)	0	0	0	<10
Temperature rise of furnace (°C)	0	0	0	<50
Temperature rise of sample (°C)	0	0	0	<50
Classification	Non-combustible	Non-combustible	Non-combustible	-

CONCLUSION:

A non-combustibility test for materials in accordance with British Standard 476 Part 4 : 1970 has been performed on the material as described in this report and the classification of the sample is non-combustible.

  
Leong Gene-Jhou  
Associate Engineer

  
Chan Lung Toa  
Product Manager  
(Fire Safety & Security Products)  
Mechanical



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January 2008