

**Classification Report No. 7191048142-MEC12/3-JV**  
**dated 20 Dec 2012**

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PSB Singapore

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**CLASSIFICATION OF REACTION TO FIRE**  
**IN ACCORDANCE WITH EN 13501-1:2007 +A1: 2009**

**Sponsor :**

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**Prepared by:**

TÜV SÜD PSB Pte Ltd

**Product name:**

“SHERA” Non-asbestos Cement Fibre Board



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This classification report consists of five pages and may only be used or reproduced in its entirety.

## 1. Introduction

This classification report defines the classification assigned to “SHERA” non-asbestos fibre cement board in accordance with the procedures given in EN 13501-1: 2007+A1:2009.

## 2. Details of classified product

### 2.1. End use application

The product is “SHERA” non-asbestos fibre cement board used for wall and ceiling.

### 2.2. Product description

The product is fully described in the test reports in support of this classification listed in clause 3.1

## 3. Test reports and results in support of classification

### 3.1 Test reports

| Name of laboratory  | Name of sponsor                               | Test report reference | Test method      |
|---------------------|---|-----------------------|------------------|
| TÜV SÜD PSB Pte Ltd | Mahaphant Fibre Cement Public Company Limited | 7191048142-MEC12/1-JV | EN ISO 1716:2010 |
| TÜV SÜD PSB Pte Ltd | Mahaphant Fibre Cement Public Company Limited | 7191048142-MEC12/2-JV | EN 13823:2010    |

### 3.2. Results

| Test method | Parameters                               | Number of tests | Test results                      |                                    |
|-------------|--|-----------------|-----------------------------------|------------------------------------|
|             |  |                 | Measured parameters (mean values) | Compliance parameters for A2-s1,d0 |
| EN 13823    | FIGRA <sub>0.2MJ</sub> (W/s)             | 3               | N.A.                              | ≤ 120                              |
|             | FIGRA <sub>0.4MJ</sub> (W/s)             |                 | N.A.                              |                                    |
|             | THR <sub>600s</sub> (MJ)                 |                 | 0.4                               | ≤ 7.5                              |
|             | LFS to edge (Yes / No)                   |                 | No                                | No                                 |
|             | SMOGRA (m <sup>2</sup> /s <sup>2</sup> ) |                 | 1.6                               | ≤ 30                               |
|             | TSP <sub>600s</sub> (m <sup>2</sup> )    |                 | 43.1                              | ≤ 50                               |
|             | Flaming Droplets / Particles (sec)       |                 | No                                | No, within 600s                    |
| EN ISO 1716 | PCS (MJ/kg)                              | 5               | 0.44                              | ≤ 3.0                              |



#### 4. Classification and field of application

##### 4.1. Reference of classification

This classification has been carried out in accordance with clause 11.8.1 of EN 13501-1: 2007 +A1: 2009.

##### 4.2. Classification

The product, "SHERA" non-asbestos fibre cement board, in relation to its reaction to fire behaviour meets the requirements to be classified as **A2**.

The additional classification in relation to smoke production is: **s1**

The additional classification in relation to flaming droplets / particles is: **d0**

| Fire behaviour |   | Smoke production |          |   | Flaming droplets |          |
|----------------|---|------------------|----------|---|------------------|----------|
| <b>A2</b>      | - | <b>s</b>         | <b>1</b> | , | <b>d</b>         | <b>0</b> |

Therefore, the classification of the "SHERA" non-asbestos fibre cement board, in accordance with EN 13501-1: 2007 +A1:2009 is:

**Reaction to fire classification: A2-s1, d0**




### 4.3. End use application and product parameter

The classification in clause 4.2 only applies to the product described in clause 2 of this report and is only valid for the following parameters and applications:

- Wall
- Ceiling

### 5.0 Limitation

This classification document does not represent type approval or certification of the product.

  
\_\_\_\_\_  
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Senior Associate Engineer

  
\_\_\_\_\_  
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Assistant Vice President  
(Fire Property)  
Mechanical Centre



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July 2011

