

**CLASSIFICATION OF REACTION  
TO FIRE PERFORMANCE  
IN ACCORDANCE WITH EN  
13501-1: 2002**

**Sponsor:** Muraspec  
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TN12 5JX  
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**Notified Body No:** 0833

**Product name:** Twistwool

**Classification report No.:** E137429

**Issue number:** 1

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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 'Twistwool' a decorative, paper backed vinyl wallcovering in accordance with the procedures given in EN 13501-1:2002

## 2. Details of classified product

### 2.1 General

The product, 'Twistwool', is defined as being suitable for wall or ceiling applications.

### 2.2 Product description

The product, 'Twistwool', is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

#### Product description:

A decorative, paper backed vinyl wallcovering (product reference "Twistwool", colour reference "P6053", batch no. 63987), bonded, utilising "Murabond Light" adhesive, applied at a coverage rate of approximately 150g/m<sup>2</sup>, to the primed face of a fibre cement board substrate. The fibre cement board substrate had a thickness of 6mm, a density of 1800kg/m<sup>3</sup> and had been coated on one face with a single coat of "Murabond PVA Primer".

The sponsor stated that "Twistwool" had a total weight of 320g/m<sup>2</sup> and comprised an 80g/m<sup>2</sup> paper which was spread coated on one (decorative) face with a 240g/m<sup>2</sup> PVC plastisol (product reference "F48") and then gravure printed and embossed.

## 3. Test reports/extended application reports & test results in support of classification

### 3.1 Test reports/extended application reports

| Name of Laboratory              | Name of sponsor | Test reports/extended application report Nos. | Test method / extended application rules & date |
|---------------------------------|-----------------|---|---|
| Warrington Fire Research Centre | Muraspec        | WARRES 136376                                 | EN 13823  |
| Warrington Fire Research Centre | Muraspec        | WARRES 136377                                 | EN ISO 11925-2                                  |

### 3.2 Test results

| Test method & test number  | Parameter                                   | No. tests | Results                         |                       |
|----------------------------|---|-----------|---------------------------------|-----------------------|
|                            |   |           | Continuous parameter - mean (m) | Compliance parameters |
| EN 13823                   | FIGRA <sub>0.2MJ</sub> ≤ 120 W/s            | 3         | 21.56                           | Y                     |
|                            | THR <sub>600s</sub> ≤ 7.5 MJ                |           | 2.32                            | Y                     |
|                            | LSF < edge                                  |           | N                               | Y                     |
|                            | SMOGRA ≤ 180 m <sup>2</sup> /s <sup>2</sup> |           | 18.20                           | Y                     |
|                            | TSP <sub>600s</sub> ≤ 200 m <sup>2</sup>    |           | 79.96                           | Y                     |
| EN ISO 11925-2             |   |           |                                 |                       |
| 30s exposure surface       | F <sub>s</sub> ≤ 150mm                      | 6         | 32                              | Y                     |
| 30s exposure edge          | F <sub>s</sub> ≤ 150mm                      | 6         | 42                              | Y                     |
| flaming droplets/particles | Ignition of filter paper                    |           | N                               | Y                     |

#### 4. Classification and field of application

##### 4.1 Reference of classification

This classification has been carried out in accordance with clause 10 of EN 13501-1:2002

##### 4.2 Classification

The product, 'Twistwool', in relation to its reaction to fire behaviour is classified:

B

The additional classification in relation to smoke production is:

s2

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

d0

The format of the reaction to fire classification for construction products excluding floorings is:

| Fire Behaviour |   | Smoke Production |   |   | Flaming Droplets |   |
|----------------|---|------------------|---|---|------------------|---|
| B              | - | s                | 2 | , | d                | 0 |

i.e. B – s2 , d0

**Reaction to fire classification: B – s2, d0**

### 4.3 Field of application

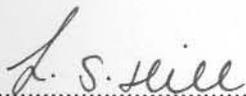
This classification is valid for the following end use applications:

- i) Wall or Ceiling Applications, used over any substrate with a density equal to or greater than  $1800 \pm 200\text{Kg/m}^3$  with a minimum thickness of 6mm and a fire performance of A2 or better when primed utilising Murabond PVA Primer. (Excluding paper faced gypsum plasterboard)
- ii) Bonded directly to the substrate utilising Murabond Light adhesive, applied at a rate of  $150\text{g/m}^2$

This classification is also valid for the following product parameters:

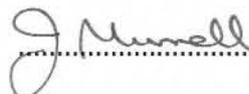
|                     |                      |
|---------------------|----------------------|
| Colour              | No variation allowed |
| Coverage Weight     | No variation allowed |
| Total Weight        | No variation allowed |
| PVC Plastisol       | No variation allowed |
| Product Formulation | No variation allowed |

#### SIGNED



**Leigh Hill**  
Technical Officer  
Technical Department

#### APPROVED



**Janet Murrell**  
Technical Manager  
Technical Department  
on behalf of  
**Warrington Fire Research Centre**