



# L o s s P r e v e n t i o n C o u n c i l

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The Netherlands.

Our ref: CC 87667/RHE

Date: 25 April 1996

Attention Mr D J Oudman

Reviewed on: 4 September 1998

## Assessment of Marlan in accordance with BS 476: Parts 6 and 7

### 1. Introduction

Samples of Marlan 6mm thick and 18mm thick have been tested in accordance with BS 476: Parts 6 and 7. This report describes the assessment which has been carried out for Marlan 12mm thick and for Marlan in terms of the Class 0 requirements of the national building regulations.

### 2. Scope

This assessment report covers the fire performance of Marlan at various thicknesses in terms of BS 476: Parts 6 and 7 and in terms of the Class 0 requirements of the national building regulations.

### 3. Supporting data

A large scale surface spread of flame test in accordance with BS 476: Part 7: 1987 was carried out for you on 7 September 1990 on 18mm-thick Marlan Uni-colour (white), a resin-based sheet, backed for the test with a non-combustible board. A Class 1 rating was achieved. See LPC test report TE 80437 for full details.

A fire propagation test in accordance with BS 476: Part 6: 1981 was carried out for you on 22 August 1990 on 18mm-thick Marlan Uni-colour (white), a resin-based sheet. The samples achieved a fire propagation index I of 8.5, comprising sub-indices  $i_1$  of 0,  $i_2$  of 5.6 and  $i_3$  of 2.9. See LPC test report TE 80435 for full details.

A large scale surface spread of flame test in accordance with BS 476: Part 7: 1987 was carried out for you on 16 October 1995 on 6mm-thick Marlan Uni-colour (white), a resin-based sheet, backed for the test with a non-combustible board. A Class 1 rating was achieved. See LPC test report TE 86800 for full details.

A fire propagation test in accordance with BS 476: Part 6: 1989 was carried out for you on 20 October 1995 on 6mm-thick Marlan Uni-colour (white), a resin-based sheet. The samples achieved a fire propagation index I of 7.4, comprising sub-indices  $i_1$  of 0.1,  $i_2$  of 4.6 and  $i_3$  of 2.7. See LPC test report TE 86798 for full details.



A large scale surface spread of flame test in accordance with BS 476: Part 7: 1987 was carried out for you on 23 November 1995 on 6mm-thick Marlan Granite colour (mottled blue/grey), a resin-based sheet, backed for the test with a non-combustible board. A Class 1Y rating was achieved. See LPC test report TE 86974 for full details.

A fire propagation test in accordance with BS 476: Part 6: 1989 was carried out for you on 18 October 1995 on 6mm-thick Marlan Granite colour (mottled blue/grey), a resin-based sheet. The samples achieved a fire propagation index I of 8.0, comprising sub-indices  $i_1$  of 0.1,  $i_2$  of 5.1 and  $i_3$  of 2.8. See LPC test report TE 86797 for full details.

#### 4. Assessment

The Class 0 requirement of the national building regulations restricts both the spread of flame across a surface and also the rate at which heat is released from it. Under the national building regulations, materials which achieve a Class 1 surface spread of flame rating in terms of BS 476: Part 7 and a fire propagation index I of not more than 12 and sub-index  $i_1$  of not more than 6 in terms of BS 476: Part 6 may also be rated as Class 0 as defined by the national building regulations.

The fire tests listed in section 3 of this report have demonstrated that Marlan, at thicknesses of 6mm and 18mm, achieved a Class 1 surface spread of flame rating and satisfied the requirements for Class 0 in terms of the national building regulations. Light coloured samples and dark coloured samples were tested and also satisfied the Class 1 and Class 0 requirements.

Therefore we are satisfied that any thickness of Marlan between 6mm and 18mm will also be suitable for the Class 1 and Class 0 classifications, irrespective of colour, providing the Marlan is mounted on a non-combustible substrate. This assessment assumes that it is the smooth face of the Marlan which is exposed to fire.

#### 5. Conclusions

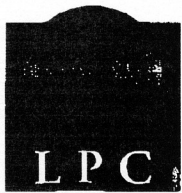
Therefore it is our opinion that Marlan at any thickness between 6mm and 18mm and irrespective of the colour, as described above, is suitable for installations where surfaces are required to have a Class 1 surface spread of flame rating in accordance with BS 476: Part 7: 1987 or a Class 0 rating in accordance with the national building regulations, providing the Marlan is mounted on a non-combustible substrate.

#### Review of assessment

This assessment was reviewed on 4 September 1998. We have received written confirmation from Poly lac Holland BV that there have been no changes in the specification of Marlan since the original date of the assessment. There have been no changes in the fire test procedures or methods of assessment which would adversely affect the fire performance of the material. We are therefore satisfied that the validity of this assessment may be extended for a further two years.

Next review date: 4 September 2000.

This assessment is based on test data, experience and the information supplied. The assessment is valid for a period of two years after which it should be returned for review to consider any additional data which has become available or any changes in the fire test procedures. Any changes in the specification of the product will invalidate this assessment.



This assessment has been carried out in accordance with Fire Test Study Group Resolution No. 64. It relates to the fire performance of the product and does not cover aspects of quality, durability, maintenance nor service requirements. This assessment does not imply that the product is the subject of a Loss Prevention Certification Board approval or certification scheme.

Reviewed by:

A handwritten signature in cursive script that reads 'Richard Earle'.

R.H.Earle  
Section Manager  
Building Product Assessments  
LPC Laboratories

A handwritten signature in cursive script that reads 'R.A. Kelly'.

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