

BRE Test Report

Non-Fragility tests to ACR[M]001:2014 on TBS Polycarbonates Polycarbonate Rooflights

Prepared for: William Gresswell
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BRE
Watford, Herts
WD25 9XX

Customer Services 0333 321 8811

From outside the UK:
T + 44 (0) 1923 664000
F + 44 (0) 1923 664010
E enquiries@bre.co.uk
www.bre.co.uk

Prepared for:
William Gresswell
TBS Polycarbonates
9 Fieldings Road
Cheshunt
Hertfordshire
EN8 9TL



Prepared by

Name Simon Feeley

Position Senior Consultant, Fire and Building Technology Group

Date 16 November 2021

Signature

A handwritten signature in black ink, appearing to read 'S. Feeley', is written over a light blue horizontal line.

Authorised by

Name Gary Timmins

Position Head of Construction Testing, Fire and Building Technology

Date 16 November 2021

Signature

A handwritten signature in black ink, appearing to read 'G. Timmins', is written over a light blue horizontal line.

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Declaration of 'Competence' as required by the standard ACR[M]001:2014

A nominated competent person is required to oversee the testing. It is assumed that the competent person will be nominated by the customer.

As defined within the standard:

A competent person is someone who can demonstrate that they have sufficient professional or technical training, knowledge, actual experience and authority to enable them to:

- a) Carry out their assigned duties at the level of responsibility allocated to them
- b) Understand any potential hazards related to the work (or equipment) under consideration
- c) Detect any technical defects or omissions in that work (or equipment)
- d) Recognise any implications for health and safety caused by those defects or omissions
- e) Be able to specify a remedial action to mitigate those implications.

In this context, a competent person is someone who can demonstrate a:

- a) Thorough knowledge of glazed roofing and of the mechanical and physical properties and behaviour of the glazed assemblies when subjected to this test; and
- b) Extensive knowledge and experience of installation of glass, its usage limitations, behaviour and mode of failure in service.

For these tests, the responsibilities of the competent person include ensuring that the worst- case scenario has been covered when:

- a) Defining the roof assembly to be tested
- b) Defining the impact position(s)
- c) Determining any conditioning of the samples and test temperatures
- d) Determining how glass is to be broken
- e) Determining the magnitude and location of the static load
- f) Deciding the number of tests necessary to ensure results are statistically significant
- g) Determining the number of panes or units to be tested
- h) Evaluating the degree of damage to the assembly
- i) Approving of the test report.

Note that the competent can in theory be anyone involved in the whole building process including the glazing system manufacturer.

Name: WILLIAM GRESSWELL

On behalf of TBS Polycarbonates

Signed: 

Date: 8 - 11 - 2021



7 Conclusions

The impact tests were conducted on three specimens of the Plasiac Wire Polycarbonate Rooflight.

The test results showed the Plasiac Wire Polycarbonate Rooflight achieved:

- Class B Non-Fragile Assembly for the first specimen
- Class B Non-Fragile Assembly for the second specimen
- Class B Non-Fragile Assembly for the third specimen

As Class B Non-Fragile Assembly was consistently achieved throughout, the Plasiac Wire Polycarbonate Rooflight is classified as **Class B Non Fragile Assembly**.