



0013

TEST REPORT

Lucideon Reference: 155545 (QT38443/1/DT)/Ref. 1/Supp1

Project Title: Accelerated Weathering Tested to ETAG 034 and TS EN 772-22 on a Jesmonite GRC Grade 18. Metallic Panel

Client: Telling Architectural Ltd
7 The Dell
Enterprise Drive
Four Ashes
Wolverhampton
WV10 7DF

For the Attention of: Mr Ian Stevenson

Author(s): Chris Rushton

Report Date: 10 February, 2016

Purchase Order No.: 006352

Work Location: Lucideon UK

Opinions and interpretations expressed herein are outside the scope of UKAS Accreditation.

This report supersedes the report issued on 22.01.16.

Miss Lisa Cobden
**Consultancy Team
Reviewer**

Mr Chris Rushton
**Consultancy Team
Project Manager**



| CONTENTS | | Page |
|-----------------|---------------------------|-------------|
| 1 | INTRODUCTION | 3 |
| 2 | SAMPLES | 3 |
| 3 | SAMPLE PREPARATION | 3 |
| 4 | TEST PROGRAMME | 3 |
| 4.1 | Heat-Rain Cycles | 3 |
| 4.2 | Freeze/Thaw Cycles | 3 |
| 5 | TEST METHOD | 3 |
| 6 | RESULTS | 4 |
| 7 | CONCLUSION | 4 |
| | PLATE | 5 |



1 INTRODUCTION

Telling Architectural Ltd required a programme of testing in order to investigate the durability of a Jesmonite GRC Grade 18. Metallic panel when subject to Accelerated Weathering in accordance with ETAG 034 and TS EN 77-22.

2 SAMPLE

One Jesmonite GRC Grade 18. Metallic panel.

3 SAMPLE PREPARATION

The sample was prepared by the client and submitted for test as a finished panel.

4 TEST PROGRAMME

The panel was subjected to Accelerated Weathering based on ETAG 034 and TS EN 772-22.

4.1 Heat-Rain Cycles

The sample was subjected to a series of 80 cycles comprising the following phases:

- 1 – Heating to +70°C (rise for 1 hour) and maintaining at (+70 ± 5)°C and 10 to 30% RH of air for 2 hours (total of 3 hours).
- 2 – Spraying for 1 hour (water temperature (+15 ± 5)°C, amount of water 1 l/m²min).
- 3 – Leave for 2 hours (drainage).

4.2 Freeze/Thaw Cycles

After at least 48 hours of subsequent conditioning at temperatures between + 10 and + 25°C and a minimum relative humidity of 50%, the same test rig is exposed to a series of 100 cycles of 24 hours comprising of the following phases:

- 1 – Exposure to (+ 20 ± 3)°C for 20 minutes.
- 2 – Exposure to spraying for 2 minutes.
- 3 – Exposure to (-15 ± 3)°C for 2 hours.

Visual observations were carried out after 50 and 100 freeze/thaw cycles.

5 TEST METHOD

The sample was photographed before and after being subject to the Accelerated Weathering.



6 RESULTS

Upon completion of the weathering cycles each panel was visually inspected to determine if any deterioration had taken place.

7 CONCLUSION

Visual inspection concludes that there was no damage to the Jesmonite GRC Grade 18. Metallic panel tested.

PLATE



Plate 1 - Before and After Weathering of the Jesmonite GRC Grade 18. Metallic Panel

Note variation in colour due to lighting conditions. No visual damage.

NOTE: The results given in this report apply only to the samples that have been tested.

END OF REPORT