

Artificial Weathering Testing Report

ISO 4892-2 Weathering & Grey Scale Assessment



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1. Summary

Three samples of WPC material were submitted by Mighton Products Ltd for artificial weathering in accordance with ISO 4892-2, subsequently followed by Grey Scale assessment in accordance with ISO 105-A02. Grey scale measurements are out with the laboratories scope of accreditation.

This testing was performed via proforma purchase order.

2. Materials

Three samples were submitted with two being for testing and one as a reference. Below details the unique id given to the material along with details supplied with the material shown in Table 1.

Material Description	Client ID	Supplier / Customer	MT/GM/Reference
None	WPC material Test	Mighton Products Ltd	9693-A
None	WPC material Test	Mighton Products Ltd	9693-B
None	WPC material Ref	Mighton Products Ltd	9693-C

Table	1	Samples	Received
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3. Observations, Deviations & Waivers

Notes contained in relevant documents are an integral part of a test, and shall be included by the client in discussions, correspondence, and presentation of test results to a third party. This test report represents only one part of the test documentation. Interim reports and other test documentation may have been submitted prior to this date. Test results reported are pertinent only to the items tested and are not relevant to other specimens of the same type, or in the same lot, which are not being tested. Test reports, and/or other pertinent test documentation, shall not be reproduced, except in full, without the written approval of Impact Solutions and so certified by the client.

4. Test Parameters

The test parameters and durations applied for the artificial weathering exposure are shown below in Table 2.

Equipment Type	O-SUN XE3		
Equipment Type	1 hr 10 mine liebt 10 mine		
Cycle	Inr 42mins light - 10 mins		
-,	light and spray		
Filters	Daylight Q		
Sample Mounting Method	2.5"x6" sample holder		
Wavelength	340nm		
Light Source	Xenon Arc		
Irradiance	0.51 W/m2		
Black Panel Sensor Type	Non-Insulated black panel		
Water Quality	Omg/l Si		
Black Panel Dark	N/A		
Black Panel Light	65°C ±3		
Relative Humidity Dark	N/A		
Relative Humidity Light	50% ±5		
Total Irradiance	1322 kJs		
Duration	720 hrs		

Table 2 Test	Parameters
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The exposure period for testing was from 28/07/2023 to 28/08/2023.

The parameters as tested fall within the accredited parameters of the laboratory as per their flexible scope of accreditation.

5. Visual Measurements

Grey Scale evaluations according to ISO 105-A02:1993; Grey Scale for assessing change in colour. Results are shown in Table 3 below.

Client ID	MT/GM/Reference	Grey Scale	Comments	Further Comments	Test Time (hours)
WPC material Test	9693-A	3	Br	-	720
WPC material Test	9693-B	3	Br	-	720

Table 3 Grey Scale Results

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VISUAL LEGEND				
ISO			VISUAL COLOUR	
5	None		BL	Bluer
4-5	Very Slight		G	Greener
4	Slight		R	Redder
3-4			Y	Yellower
3	Moderate		W	Weaker
2-3			Str	Stronger
2	Pronounced		D	Duller
1-2	Severe		Br	Brighter
1	Very Severe			

Figure 1 Visual Legend

----- End of Report -----