

DATE OF ISSUE: 9 March 2009

REFERENCE: P1719-6

PAGE 1 OF 4 PAGES

TEST REPORT

CUSTOMER: Profine Gmbh
Mulheimer Str 26
53840 Troisdorf
Germany
c/o Hans Schlick
Profine GmbH
67 Burns Road
Springwood NSW 2777
Australia

CUSTOMER REFERENCE: Hans Schlick

TEST SPECIFICATION: EN 12608:2003 Unplasticized polyvinylchloride (PVC-u) profiles for the fabrication of windows and doors

ITEM TESTED: Two samples of PVC-u profile Renocol silver

DATE OF TEST: October 2006 to February 2009

RESULTS: Refer to the body of this report.

This report relates only to the results obtained from the tests performed on the samples submitted.

COMPILED BY: A.L. Carson
Laboratory Manager



Report on Artificial weathering and testing of PVC-u profile, (Renocol Silver) for the fabrication of windows and doors.

Synopsis

Two samples of Silver Renocol PVC-u window and door profile, (See figure 1), were submitted for artificial weathering and testing in accordance with clause 5.8 Resistance to Weathering of EN 12608:2003. In variation to the standard the UV exposure apparatus as shown in figure 2 was used and the exposure time increased to 18000 hours to represent 15 years of outdoor weathering.

The profile submitted was found to **comply** with the requirements of the clauses tested.



Figure 1



Figure 2

Calculation of Exposure time

The equivalent exposure time, for a severe environment, in the conditioning chamber for 15 years of natural exposure is 18000 hours using a xenon arc lamp of 550watts/m² spectral irradiance. The definition of a severe environment is:

Annual total solar energy on horizontal surface	>5Gjoules/m ²
Average of the daily maximum temperature of the warmest month per year	>22 degrees Celsius

**from EN 12608 Unplasticized polyvinylchloride (PVC-u) profiles for the fabrication of windows and doors.*

At the request of the client the parameters for a severe environment were used as the basis for the time of exposure to artificial weathering.

The Ultraviolet exposure is only an approximation of natural exposure bearing in mind that natural weathering is a variable phenomenon depending on location, aspect, shading etc.

Results:

Clause 5.8.3 Colour fastness

At the completion of conditioning the specimen was removed from the chamber and assessed for visual change in colour using a grey scale in accordance with ISO 105-A02:1987. The visual change in colour was assessed being between 1.5 and 2.0 on the grey scale. This result **complies** with the requirements of clause 5.8.3 of EN 12608 Unplasticized polyvinylchloride (PVC-u) profiles for the fabrication of windows and doors.