DANAK
TEST Reg.No. 2

DANISH TECHNOLOGICAL INSTITUTE

Teknologiparken
Kongsvang Allé 29
DK-8000 Aarhus C
Tel. +45 72 20 10 00
Fax +45 72 20 10 19
info@teknologisk.dk
www.teknologisk.dk

aluplast GmbH
Auf der Breit 2
DE-76227 Karlsruhe
Germany

Order no.	0301/421171-A
Page	1 of 3
Appendices	1
Initials	MJLD/vem

CE 1235
EU Notified Body

Test report

Test specimen: Top swing window made of PVC(U) with hardware and safety fixing device from IPA of the type 62552/62562.
Width x height: 1230 x 1480 mm.
Construction: 4/18/4 (glass/spacer/glass).

Sampling: The test specimen was forwarded by the client and received at the Danish Technological Institute on 2011-03-23. The test specimen was marked 421171-A by the laboratory.

Method:
EN 14351-1 (2006): Windows and doors - Product standard, performance characteristics - Part 1: Windows and external pedestrian doorsets without resistance to fire/or smoke leakage characteristics Clause 4.8: Load bearing capacity of safety devices
EN 14609 (2003): Windows - Determination of the resistance to static torsion

Period: The testing was carried out 2011-03-23.

Result: The result of the test fulfils the requirements of EN 14351-1, clause 4.8.

Terms: The test has been performed according to the enclosed conditions, which are according to the guidelines laid down by DANAK (The Danish Accreditation Scheme). The testing is only valid for the tested specimen. The test report may only be extracted if the laboratory has approved the extract.

2011-03-29, Danish Technological Institute, Building Technology, Aarhus

Morten Jul Laegaard
Consultant

Telephone: +45 7220 1132
E-mail: mjld@teknologisk.dk

Morten Johansen
Team manager

Telephone: +45 7220 1142
E-mail: moj@teknologisk.dk

Test Procedure

The window was mounted in the test rig and the casement was opened and rotated about 180° to engage the fixing device used for cleaning. The fixing device was located on the right side of the window, seen from the outside, and therefore the window was loaded at this side at first, after which it was loaded similarly at the opposite side. At both sides the load was applied perpendicular to the bottom of the casement.

The loading of the casement was conducted in the way that at first a pre-load of 35 N was applied for 60 sec. and followed by a 60 sec. relief. Afterwards a 350 N load was applied for 60 sec. if the casement was held in place during the loading. This loading procedure was used at both sides of the window.

Window mounted in test rig (after the second test).

Window during testing.

Test result

During applying the first load the casement was held in place for 60 sec. with a 350 N load.

No damage to the window was observed after the first load and the casement was operable after the test.

During applying the second load the casement was held in place for 60 sec. with a 350 N load.

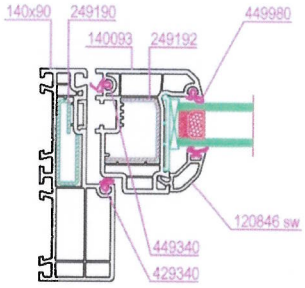
Damage to the window in the form of broken glass was observed after the second load, but the casement was operable after the test.

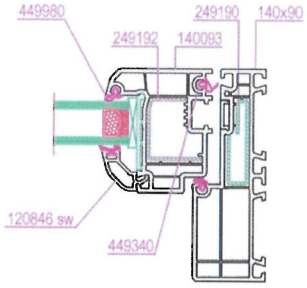
DANISH TECHNOLOGICAL INSTITUTE

aluplast® GmbH
Kunststoffprofile, Auf der Breit 2, D-76227 Karlsruhe
Telefon: +49 (721) 4 71 71 - 0; Telefax: +49 (721) 4 71 71 - 999
E-Mail: info@aluplast.de / www.aluplast.de

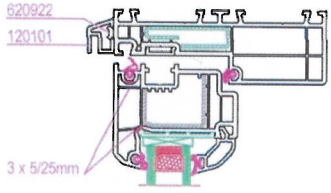
Fensterelement: Top Hung / Klapp-Fenster

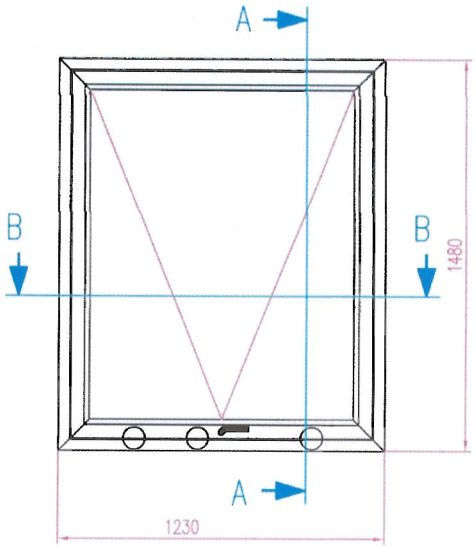
Anlage: 01
Maßstab: 1:3 / 1:20
Datum: 2007-05

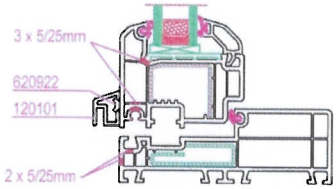




Schnitt B-B







Schnitt A-A

PK4ID_2007-05-03_SKG*
Technische Änderungen vorbehalten!

The general conditions pertaining to assignments accepted by Danish Technological Institute shall apply in full to the technical testing and calibration at Danish Technological Institute and to the completion of test reports and calibration certificates within the relevant field.

DANAK

The Danish Accreditation and Metrology Fund - DANAK - is managing the Danish accreditation scheme based on a contract with the Danish Safety Technology Authority under the Danish Ministry of Economics and Business Affairs who is responsible for the legislation on accreditation in Denmark.

The fundamental criteria for accreditation are described in DS/EN ISO/IEC 17025: "General requirements for the competence of testing and calibration laboratories". DANAK uses guidance documents to clarify the requirements in the standards, where this is considered to be necessary. These will mainly be drawn up by the "European co-operation for Accreditation (EA)" or the "International Laboratory Accreditation Co-operation (ILAC)" with a view to obtaining uniform criteria for accreditation worldwide. In addition, the Danish Safety Technology Authority issues Technical Regulations prepared by DANAK with specific requirements for accreditation that are not contained in the standards.

In order for a laboratory to be accredited it is, among other things, required:

- that the laboratory and its personnel are free from any commercial, financial or other pressures, which might influence their impartiality;
- that the laboratory operates a documented management system, and has a management that ensures that the system is followed and maintained;
- that the laboratory has at its disposal all items of equipment, facilities and premises required for correct performance of the service that it is accredited to perform;
- that the laboratory has at its disposal personnel with technical competence and practical experience in performing the services that they are accredited to perform;
- that the laboratory has procedures for traceability and uncertainty calculations;
- that accredited testing are performed in accordance with fully validated and documented methods;
- that accredited services are performed and reported in confidentiality with the customer and in compliance with the customer's request;
- that the laboratory keeps records which contain sufficient information to permit repetition of the accredited test;
- that the laboratory is subject to surveillance by DANAK on a regular basis;
- that the laboratory shall take out an insurance, which covers liability in connection with the performance of accredited services.

Reports carrying DANAK's accreditation mark are used when reporting accredited services and show that these have been performed in accordance with the rules for accreditation.