TEST Reg.No. 2

DANISH TECHNOLOGICAL INSTITUTE

Dolle A/S
Vestergade 47
DK-7741 Froestrup
Denmark

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

Test report

Test specimen: Folding loft ladder with insulated hatch, **Model CF36**, further details can be found on page 2.

Sampling: The test specimen was forwarded by the client and received at the Danish Technological Institute on 2014-06-02. The test specimen was marked 601322 CF36 by the laboratory.

Method: EN 1026 (2000): Windows and doors – Air permeability – Test method

The client has informed the laboratory that the choice of method is in accordance with common practice in the market for loft ladders.

Period: The testing was carried out on 2014-06-02.

Result: Classification of the test specimen according to EN 12207 – Windows and doors – Air permeability – Classification:

Air permeability: **Class 4 at ±600 Pa**

The results of the test appear from page 3-5.

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.

2014-06-13, Danish Technological Institute, Sustainable Building

Morten Jul Laegaard
B Sc, Team Manager

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

Morten B. Johansen
M Sc, Engineering

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

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Description of test specimen

The test specimen consists of a wooden folding loft ladder with insulated loft hatch made of plastic material, see drawings in Appendix 1.

The test conditions and the dimensions of the test specimen were measured by the laboratory and appear from the table below.

Width [mm]	Height [mm]	Area [m²]	Length of joint [m]	Temperature [°C]	Atmospheric pressure [hPa]
0,676	1,175	0,794	3,520	22,3	1012

The client has given the following information about the construction of the test specimen:

Product name	**ClickFix 36**
Gaskets	Q-lon
Thickness of hatch	36 mm
Hardware	See appendix

Loft ladder before and during testing

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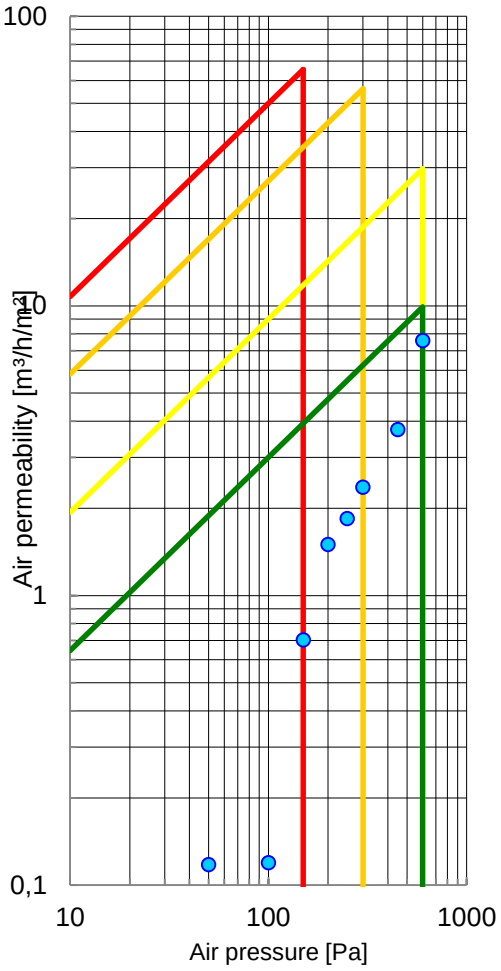
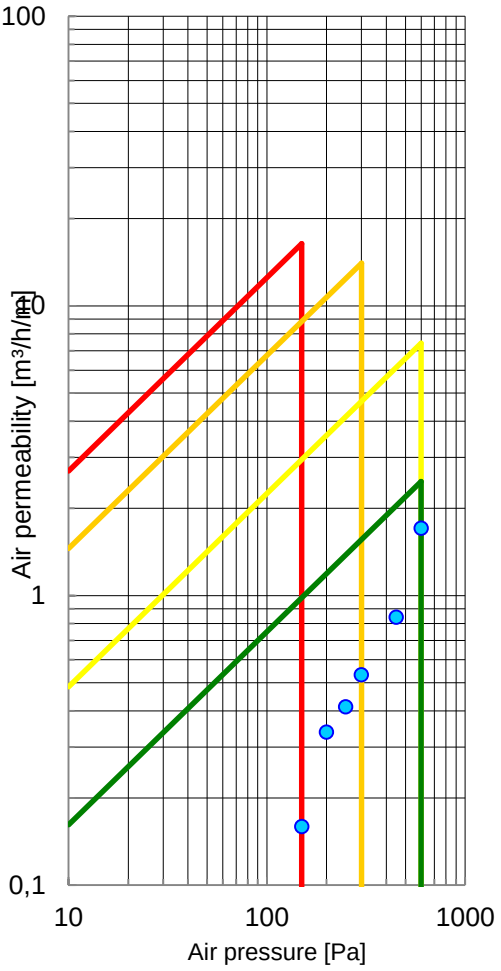
CF36 - Test results – Air permeability – Positive air pressure

Air pressure [Pa]	Air flow Total [m³/h]	Air flow Area [m³/h/m²]	Air flow Length of joint [m³/h/m]	Class Area [-]	Class Length of joint [-]
50	0,10	0,12	0,03	4	4
100	0,10	0,12	0,03	4	4
150	0,56	0,70	0,16	4	4
200	1,19	1,50	0,34	4	4
250	1,47	1,84	0,41	4	4
300	1,88	2,37	0,53	4	4
450	2,97	3,74	0,84	4	4
600	6,02	7,58	1,71	4	4



Air permeability related to area.



Air permeability related to length of joint.

The graphs show the classification in relation to the area and the length of joint.
Classes 1-4 are indicated by red, orange, yellow and green fields respectively.

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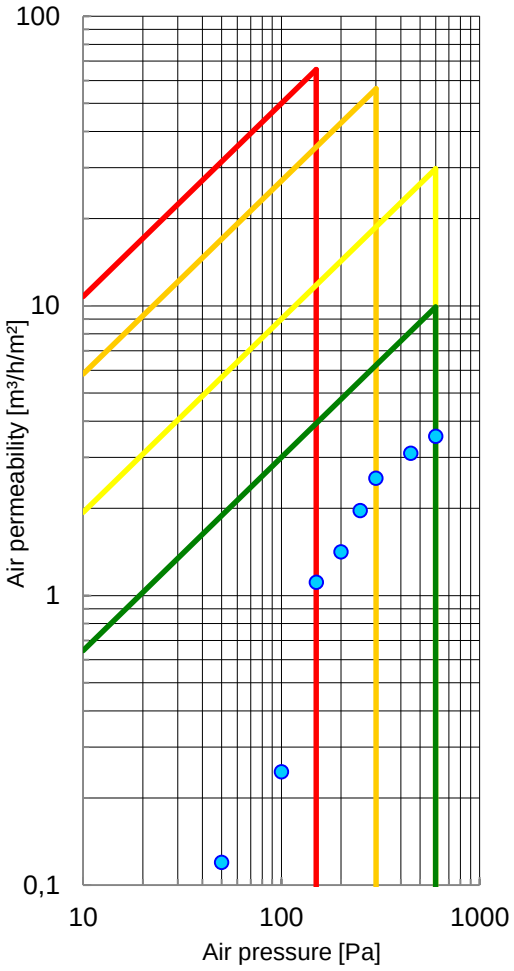
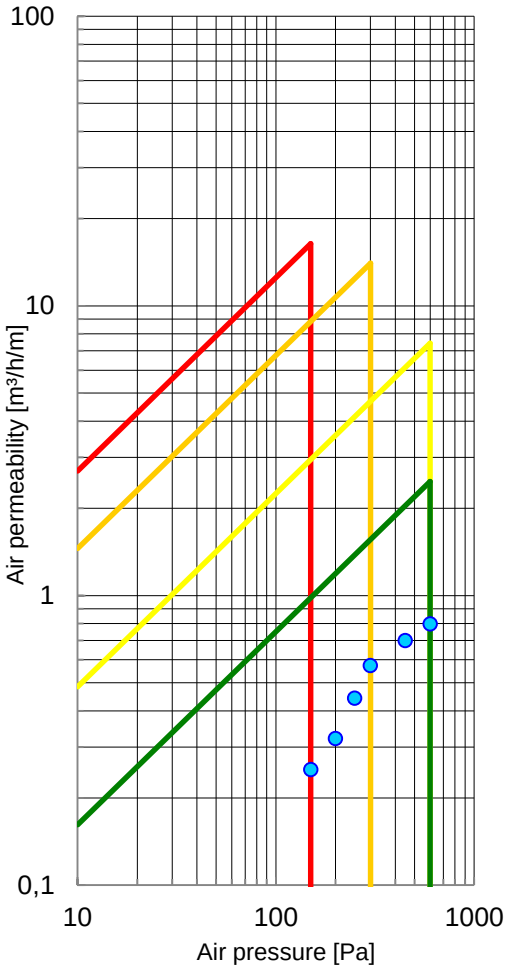
CF36 - Test results – Air permeability – Negative air pressure

Air pressure [Pa]	Air flow Total [m³/h]	Air flow Area [m³/h/m²]	Air flow Length of joint [m³/h/m]	Class Area [-]	Class Length of joint [-]
50	0,10	0,12	0,03	4	4
100	0,20	0,25	0,06	4	4
150	0,88	1,11	0,25	4	4
200	1,13	1,42	0,32	4	4
250	1,56	1,96	0,44	4	4
300	2,01	2,54	0,57	4	4
450	2,46	3,10	0,70	4	4
600	2,82	3,55	0,80	4	4



Air permeability related to area.



Air permeability related to length of joint.

The graphs show the classification in relation to the area and the length of joint.
Classes 1-4 are indicated by red, orange, yellow and green fields respectively.

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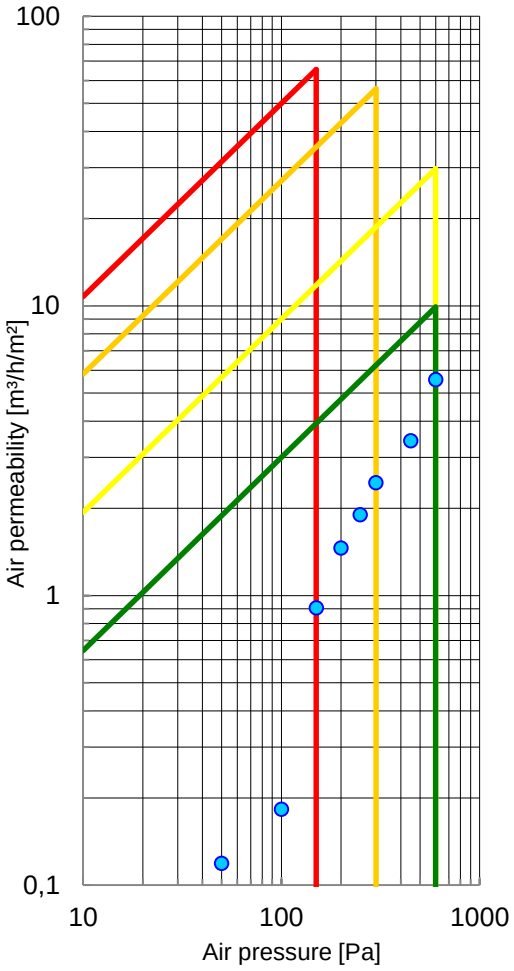
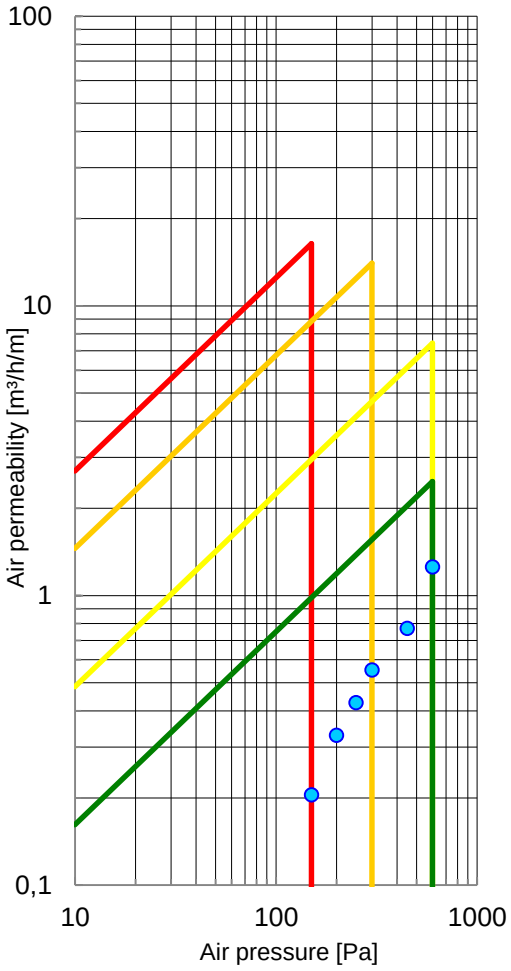
CF36 - Test results – Average air permeability

Air pressure [Pa]	Air flow Total [m³/h]	Air flow Area [m³/h/m²]	Air flow Length of joint [m³/h/m]	Class Area [-]	Class Length of joint [-]
50	0,10	0,12	0,03	4	4
100	0,15	0,18	0,04	4	4
150	0,72	0,91	0,20	4	4
200	1,16	1,46	0,33	4	4
250	1,51	1,90	0,43	4	4
300	1,95	2,45	0,55	4	4
450	2,72	3,42	0,77	4	4
600	4,42	5,57	1,26	4	4



Air permeability related to area.



Air permeability related to length of joint.

The graphs show the classification in relation to the area and the length of joint.
Classes 1-4 are indicated by red, orange, yellow and green fields respectively.

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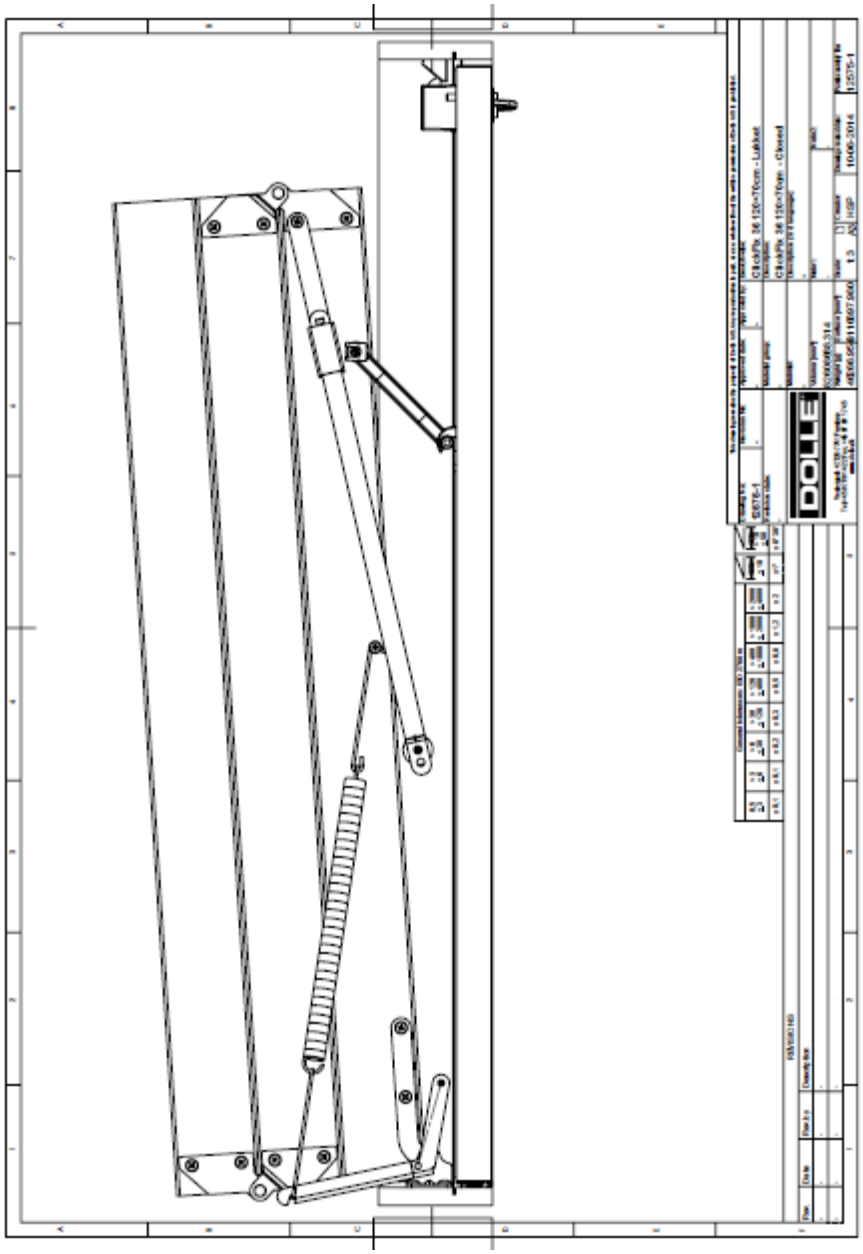

Section of C36

DANISH TECHNOLOGICAL INSTITUTE

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.
DTI vouches for that employees performing tests for use with harmonized standards under notification No. 1235, pursuant to EU Regulation 305/2011, Article 43, meet all the requirements of capability, integrity and impartiality. See next page.

DANAK

The Danish Accreditation and Metrology Fund – DANAK – is managing the Danish accreditation scheme based on a contract with the Danish Safety Technology Authority 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.

Construction Product Regulation (CPR) – EU 305/2011 – Article 43:
Requirements for notified bodies.

1. For the purposes of notification, a notified body shall meet the requirements set out in paragraphs 2 to 11.

2. A notified body shall be established under national law and have legal personality.

3. A notified body shall be a third-party body independent from the organisation or the construction product it assesses.

   A body belonging to a business association or professional federation representing undertakings involved in the design, manufacturing, provision, assembly, use or maintenance of construction products which it assesses, can on condition that its independence and the absence of any conflict of interest are demonstrated, be considered to be such a body.

4. A notified body, its top-level management and the personnel responsible for carrying out the third party tasks in the process of assessment and verification of constancy of performance shall not be the designer, manufacturer, supplier, installer, purchaser, owner, user or maintainer of the construction products which it assesses, nor the authorised representative of any of those parties. This shall not preclude the use of assessed products that are necessary for the operations of the notified body or the use of products for personal purposes.

   A notified body, its top-level management and the personnel responsible for carrying out the third party tasks in the process of assessment and verification of constancy of performance shall not become directly involved in the design, manufacture or construction, marketing, installation, use or maintenance of those construction products, nor represent the parties engaged in those activities. They shall not engage in any activity that may conflict with their independence of judgement and integrity related to the activities for which they have been notified. This shall, in particular, apply to consultancy services.

   A notified body shall ensure that activities of its subsidiaries or subcontractors do not affect the confidentiality, objectivity and impartiality of its assessment and/or verification activities.

5. A notified body and its personnel shall carry out the third party tasks in the process of assessment and verification of constancy of performance with the highest degree of professional integrity and requisite technical competence in the specific field and must be free from all pressures and inducements, particularly financial, which might influence their judgement or the results of their assessment and/or verification activities, especially from persons or groups of persons with an interest in the results of those activities.

6. A notified body shall be capable of carrying out all the third party tasks in the process of assessment and verification of constancy of performance assigned to it in accordance with Annex V in relation to which it has been notified, whether those tasks are carried out by the notified body itself or on its behalf and under its responsibility.

   At all times and for each system of assessment and verification of constancy of performance and for each kind or category of construction products, essential characteristics and tasks in relation to which it has been notified, the notified body shall have the following at its disposal:

(a) the necessary personnel with technical knowledge and sufficient and appropriate experience to perform the third party tasks in the process of assessment and verification of constancy of performance;

(b) the necessary description of procedures according to which the assessment of performance is carried out, ensuring the transparency and the ability of reproduction of these procedures; it shall have appropriate policies and procedures in place that distinguish between the tasks it carries out as a notified body and other activities;

(c) the necessary procedures to perform its activities which take due account of the size of an undertaking, the sector in which it operates, its structure, the degree of complexity of the product technology in question and the mass or serial nature of the production process.

   A notified body shall have the means necessary to perform the technical and administrative tasks connected with the activities for which it is notified in an appropriate manner and shall have access to all necessary equipment or facilities.

7. The personnel responsible for carrying out the activities in relation to which the body has been notified, shall have the following:

(a) sound technical and vocational training covering all the third party tasks in the process of assessment and verification of constancy of performance within the relevant scope for which the body has been notified;

(b) satisfactory knowledge of the requirements of the assessments and verifications they carry out and adequate authority to carry out such operations;

(c) appropriate knowledge and understanding of the applicable harmonised standards and of the relevant provisions of the Regulation;

(d) the ability required to draw up the certificates, records and reports to demonstrate that the assessments and the verifications have been carried out.

8. The impartiality of the notified body, its top-level management and assessment personnel shall be guaranteed.

   The remuneration of the notified body's top-level management and assessment personnel shall not depend on the number of assessments carried out or on the results of such assessments.

9. A notified body shall take out liability insurance unless liability is assumed by the Member State in accordance with national law, or the Member State itself is directly responsible for the assessment and/or the verification performed.

10. The personnel of the notified body shall be bound to observe professional secrecy with regard to all information gained in carrying out its tasks under Annex V, except in relation to the competent administrative authorities of the Member State in which its activities are carried out. Proprietary rights shall be protected.

11. A notified body shall participate in, or ensure that its assessment personnel is informed of, the relevant standardisation activities and the activities of the notified body coordination group established under this Regulation and shall apply as general guidance the administrative decisions and documents produced as a work result of that group.