QM338

# Certification Scheme for Gaskets and Weatherstripping

## according to EN 12365:2003

**Product quality**
Gaskets and weatherstripping
*EN 12365:2003*

ZERTIFIZIERT No.: 593 XXX





ift Rosenheim GmbH
Theodor-Gietl-Str. 7-9
83026 Rosenheim
GERMANY

+49 8031 261-0
info@ift-rosenheim.de
www.ift-rosenheim.de

Notified Body 0757
PÜZ-Stelle BAY 18

Accredited Certification Body
Products + Services
EN ISO/IEC 17065

## 1 Objective and scope

The present Certification Scheme lays down the procedures and requirements for affixing the “ift-certified“ mark on gaskets and weatherstripping. It is based on the standard EN 12365:2003 as well as on the test criteria set out in Annex 2 to this Certification Scheme.

The basis of certification and testing is given below. The methods and procedures described therein assure conformity with the requirements for the product characteristics of gaskets and weatherstripping, referred to in the following as ”gaskets“.

The present Certification Scheme details and/or supplements the requirements laid down by ift-Q-Zert in the ”General requirements for the certification of products“.

The present Certification Scheme lays the basis for the replacement of gaskets in building components as per EN 14351-1:2006. Further details on the replacement of gaskets are given in Annex 1.

## 2 Basis of certification and testing

- EN 12365:2003,
- Annex 2 of the Certification Scheme: Test of gaskets and weatherstripping,
- EN ISO/IEC 17065,
- General requirements for the certification of products by ift-Q-Zert,
- DIN 18200:2000 „Übereinstimmungsnachweis für Bauprodukte; werkseigene Produktionskontrolle, Fremdüberwachung und Zertifizierung von Produkten. (Assessment of conformity for construction products - Certification of construction products by certification body).

## 3 Terms and definitions

### 3.1 Owner of test report

Organisation which commissions a testing body with determining and/or testing specific or various characteristics of a construction product and which receives from the testing body a report on the results obtained.

### 3.2 Manufacturer

Organisation which produces complete products from individual components. The manufacturer may also be represented by companies authorized by him to manufacture the products or assemblies.

### 3.3 Product

Under the present Certification Scheme, product is defined as a gasket or weatherstripping manufactured in its entirety by the manufacturer. Responsibility for conformity of performance lies with the manufacturer of the products.

### 3.4 In-house test laboratory

Test laboratory of manufacturer where the characteristic material data are verified on a regular basis and according to customer specifications.

## 4 Certification procedure

- Signature of a certification and surveillance contract,
- Definition of scope of product certification / certificate,
- Initial type test,
- Evaluation of test evidence and/or test documents (functional values of gaskets and/or weatherstripping, supplies),
- Initial audit/inspection of production plant and in-house test laboratory,
- Regular audit,
- Certification of gaskets and weatherstripping.

### 4.1 Initial type test

#### 4.1.1 Minimum requirements

In the framework of the present Certification Scheme, compliance of gaskets and weatherstripping with the following minimum requirements for each material group shall be verified by a testing body acknowledged by ift-Q-Zert:

- Test as per EN 12365-2:2003, linear compression force,
- Test as per EN 12365-3:2003, deflection recovery,
- Test as per EN 12365-4:2003, long term recovery.
- Test as per ift Guideline ”Verträglichkeit von Dichtprofilen mit Anstrichen auf Holz“.(Compatibility of weatherstripping with coatings on wood).

### 4.1.2 Minimum classification:

In the framework of the present Certification Scheme, evidence of compliance with the following minimum requirements for classification of gaskets and weatherstripping shall be provided:

| | Windows | External pedestrian doorset | Comments |
|---|---|---|---|
| Working range | **3** (> 2 mm to ≤ 4 mm) | **4** (> 4 mm to ≤ 6 mm) | equal or higher classes |
| Compression force | **5** (> 100 N/m to ≤ 200 N/m) | **5** (> 100 N/m to ≤ 200 N/m) | equal or higher classes |
| Working temperature range* | **2** (-10 °C to +55 °C) | **2** (-10 °C to +55 °C) | equal or higher classes |

*as specified by manufacturer

In addition, processing instructions and a type sheet have to be prepared for each gasket and/or weatherstripping as per Annex 3 and submitted to the certification body.

### 4.2 Initial audit/inspection of production plant and in-house test laboratory

The contents and objective of the initial audit/inspection are laid down and/or described by ift-Q-Zert in the “General requirements for the certification products”. The initial audit includes the inspection of the manufacturer’s in-house laboratory.

The positive outcome of the initial audit/inspection has to be confirmed by a positive outcome of the regular audit.

## 5 Third party control/surveillance of manufacturer

### 5.1 Regular audit / laboratory tests

Procedure and contents of regular audits are, among others, based on the following standards and documents:

- DIN 18200:2000 “Assessment of conformity for construction products - Certification of construction products by certification body”,
- ”General requirements for the certification of products” by ift-Q-Zert.

The regular audit is conducted once a year in the form of a surveillance inspection at the manufacturers premises including samples taken from ongoing production for comparative testing at the ift laboratory. At least 10 samples from one weatherstripping variant (length ea. 100 mm) shall be tested. The specimens for laboratory testing shall be sampled by the ift auditor from ongoing production. Laboratory testing shall be conducted as set out in Annex 2 of this Certification Scheme. The objective is verification and comparison with the results obtained by the manufacturer’s test laboratory.

The results are compared with the test results from the manufacturer's in-house test laboratory. The results (mean value) shall not be 20% higher/lower than the results from the initial type test.

In the case of non-conformities, a repeat test shall be conducted of at least another batch of the same product.

If non-conformities are detected during the regular audit or the ift laboratory test, they shall be discharged immediately, at the latest within 8 weeks.

### 5.2 Special audit

In the case of a negative outcome of the regular audit, a special audit will be conducted at the plant of the manufacturer producing the nonconforming products, within 8 weeks after the regular audit. Non-conforming products are not allowed to be placed on the market.

The special audit may be conducted in the form of surveillance at the manufacturer's premises and/or as comparative laboratory testing at the ift laboratory.

Manufacturer is obliged to immediately inform ift-Q-Zert in writing of the discharge of the non-conformities.

The special audit will also be conducted if conclusions can be drawn from information provided by customers of the manufacturer to ift-Q-Zert which point to systematic non-conformity of product quality.

## 6 Factory production control

The scope and the documentation of factory production control shall be agreed between the manufacturer and ift-Q-Zert during the initial audit. Consistency in quality and workmanship of the gaskets and weatherstripping must be guaranteed. The following lays down additional basic principles of factory production control:

- The scope of factory production control is based on Guidance Paper B,
- Manufacturer shall introduce and document an efficient procedure to handle customer complaints,
- During third-party control/surveillance and/or RE-Certification, ift-Q-Zert will check proper performance of factory production control and its adjustment to new test methods or to new provisions/requirements by ift-Q-Zert.

### 6.1 Serviceability and durability of gaskets and weatherstripping

By selecting suitable materials and ensuring proper workmanship, the gaskets and weatherstripping must be operable and suitable for the intended use for an adequate period of time. The manufacturer is obliged to provide respective information in its product descriptions and/or system description.

Any requirements for materials or supplies which are subject to European material or product standards must be fulfilled.

## 6.2 Marking

A durable mark shall be affixed on each running metre of the weatherstripping to ensure traceability of the products.

## 7 RE-Certification

The ift certificate is valid for 3 years. The certificate is renewed during RE-Certification based on the scope of initial audit/inspection.

## Annex 1: Rules for replacement of gaskets and weatherstripping in building components as per EN 14351-1:2006 + A2:2016

The weatherstripping must be technically comparable.

| No. | Characteristics | Rules | Replacement |
|---|---|---|---|
| 1. | Resistance to wind load | No impact | Yes |
| 2. | Resistance to snow load | No rules | Yes |
| 3. | Reaction to fire | At least class E as per EN 13501-1:2007 + A1:2009 or B2 as per DIN 4102-2:1977 | Yes, equal or higher class |
| 4. | External fire performance | No rules | Yes |
| 5. | Watertightnesst | Comparative test on calibrated test bench*; test size 1.23 m x 1.48 m (windows) resp. 1.00 m x 2.00 m (external pedestrian doorsets) | Yes, if positive results, equal or higher classes |
| 6. | Dangerous substances | No rules | Yes |
| 7. | Impact resistance | No impact | Yes |
| 8. | Load bearing capacity of safety devices | No impact | Yes |
| 9. | Ability to release | Comparative measurement as per EN 179:2008, EN 1125:2008, prEN 13633:2009 or prEN 13637:2014 by notified body acc. to CE certificate of conformity | Yes, equal or better values |
| 10. | Acoustic performance | Yes, under consideration of No. 13 | Yes |
| 11. | Thermal transmittance | Yes, under consideration of No. 13 | Yes |
| 12. | Radiation properties | No impact | Yes |
| 13. | Air permeability | Comparative test on calibrated test bench*; test size 1.23 m x 1.48 m (windows) resp. 1.00 m x 2.00 m (external pedestrian doorsets) | Yes, if positive results equal or higher class |
| 14. | Operating forces | Comparative test using calibrated test equipment, test size 1.23 m x 1.48 m (windows) resp. 1.00 m x 2.00 m (external pedestrian doorsets) | Yes, if positive results, equal or lower class |
| 15. | Mechanical strength | No impact | Yes |
| 16. | Ventilation | No impact | Yes |
| 17. | Bullet resistance | Under consideration of CE certificate of conformity | Yes |
| 18. | Explosion resistance | Under consideration of CE certificate of conformity | Yes |
| 19. | Durability/Repeated opening and closing | No impact | Yes, subject to specified number of cycles |
| 20. | Behaviour between different climates | No impact | Yes |
| 21. | Burglar resistance | No impact | Yes |

*Calibration must be carried out in accordance with the ift Guideline.

## Annex 2: Test of gaskets and weatherstripping

During initial audit/inspection / RE-Certification resp. regular surveillance, samples are taken from the manufacturer's ongoing production once a year and tested at the laboratory of ift Rosenheim. At least 10 samples from one weatherstripping variant (length 100 mm) shall be tested. The test results shall not be 20% higher/lower than the results from the initial type test.

The test specimen description of the gaskets shall include the following information: material, geometry, field of application (overlap gasket, centre gasket, etc.), working temperature range and working range.

**Test of weatherstripping:**

- Initial type test of new weatherstripping – determination of attenuated total reflection using infrared spectrometric measurement,
- Compression test as per EN 12365-2:2003 and short-term deflection recovery test as per EN 12365-3:2003,
- UV resistance as per EN ISO 11431:2002,
- Compression test as per EN 12365-2:2003 (in the case of changed compression force additional determination of attenuated total reflection using infrared spectrometric measurement).

## Annex 3: Type sheet of gasket and/or weatherstripping

**Representation and design:**

| | |
|---|---|
| Logo | **Manufacturer**<br>**Type**<br>**Material**<br>**Corner design** |
| Representation of gaskets profile with and without load | **Usage**<br>**Classification according to EN 12365**<br>**ift-Product certification** QM 338 Dichtungen und Dichtungsprofile Nr. |

| | | | |
|---|---|---|---|
| **Rebate height** | | **Application** | |
| **Groove width** | | | |
| **Air gap (rebate)** | | **Depth of groove** | |

**Test results as per EN 12365:2003:**

| | **Window** | **External pedestrian doorset** |
|---|---|---|
| **Test result as per EN 12365-2:2003** | | |
| **Test result as per EN 12365-3:2003** | | |
| **Test result as per EN 12365-4:2003** | | |

**Notes on processing**

Observe manufacturer's processing instructions and product documentation.

**Method of fitting the weatherstripping**

**Corner designs**

**Factory Production Control**

**Control of income goods**

**Produktionskontrolle**

**Control of outgoing goods**

**Storage**