Competent
Independent
Innovative

Institute for research, testing and certification
of windows, facades, doors, gates, glass, and building materials
COMMITTED TO SAFETY, QUALITY AND THE PEOPLE
“ALL SERVICES FROM A SINGLE SOURCE IN THE SERVICE OF HOLISTIC QUALITY AND SUITABILITY OF USE – THAT HAS BEEN OUR PHILOSOPHY SINCE THE INSTITUTE WAS FOUNDED IN 1966.”

Holistic testing and evaluation of products to us means that we estimate the sum total of all properties and their balanced interaction so that this gives rise to quality, suitability of use and a long service life.

Since 50 years, ift Rosenheim has been focussing on building elements and construction materials with all their properties, for example, leak tightness, strength, security or thermal and sound insulation and fire safety. The reason being that we would only like to work where we create value addition and benefits by our skills and experience. More than 200 employees are working in interdisciplinary teams in order to solve complex problems practically and efficiently. This packaged technical competence from a single source with short paths is unique in the world and is appreciated by manufacturers, building owners and planners.

One of our core competencies is also curiosity and research as a driver of progress and a source of technological advantage and economic success. This also calls for the courage to make errors, accept them and correct them – we stand up to this.

This holistic approach, test competence and experience of ift Rosenheim gives manufacturers, planners, building owners and users the assurance that all aspects are taken into consideration, the tested products are suitable for use and the characteristic values and verifications obtained by ift Rosenheim are 100 per cent technically correct.

Prof. Uli Sieberath and Dr. Jochen Peichl  
Directors of ift Rosenheim
50 years in service of quality

Today, about 200 employees from different technical and scientific disciplines are working with inspiration and skills so that construction products become better, more environmentally friendly, more comfortable and safer. The most modern test instruments are available for this purpose, spread over approximately 5,000 square meters of laboratory area.

Yesterday, just like today, it is true that only honest, independent and competent testing leads to safety and progress. As an institute, ift Rosenheim is understood as a "test conscience" and mediator in case of conflicts of interest between the industry, society and users. Participation in 100 standardisation committees as well as an archive with over 6,000 standards provide the assurance that all tests, expertises and certificates conform to the state-of-the-art technology and the current standardisation.

The independence is safeguarded by a wide customer hierarchy, stringent audits of external accreditation bodies as well as its own financial strength. This is why manufacturers, architects, planners and authorities worldwide repose their trust in the tests reports, assessments, certifications and expertises of ift Rosenheim.

AUDITING AND TESTING ARE SKILLS WITH WHICH HUMAN BEINGS HAVE MADE ADVANCEMENTS IN TECHNOLOGY SINCE THE STONE AGE. THIS INCLUDES EXPERIENCE, PERSEVERANCE AND PASSION. Since 1996, ift Rosenheim has been doing research and testing the function, suitability of use, security, safety and quality of building elements, construction materials, wall systems, flooring and ceiling systems. This primarily includes windows, facades, doors, gates as well as ceiling and glazing systems. This is supplemented by all necessary construction materials and accessories such as insulation and sealing materials, screws and fittings, electrical drives and a host of other materials.

At the beginning, the focus lay on the optimisation of wooden windows and doors in order to solve problems with air and water tightness as well as durability. As the years went by, several new aspects came to light, for example, fire safety, sound and thermal insulation or safety of use, health and environmental compatibility. Even the testing and evaluation of new materials used such as aluminium, plastics and composite materials has led to advanced development and growth of the institute.
QUALITY IS RELATIVE, AND IT ALL BEGINS WITH THE DEFINITION AND COMPREHENSIBLE DESCRIPTION OF THE DESIRED QUALITY.

When analysing construction-related damages, defects and complaints, we often come across the unfavourable consequences if this work is not done. We pose this task to ourselves, since we believe that long-lasting construction products deserve proper quality so that human beings and nature are protected against the accidents and risks caused by harmful substances. Meaningful and relevant quality standards are developed jointly with manufacturers, institutions and the authorities that offer reasonable and affordable product quality to the end user.

Quality surveillance encompasses far more than the audit of normative and statutory minimum standards, in which there are loopholes when it comes to quality. The CE mark prescribed for Europe foresees, for example, only the one time "Type Test" (TT) on one sample, which is generally an optimised prototype. The onus of whether these determined characteristics are still achieved even in "mass manufacture" and after assembly and installation at site, lies solely with the manufacturer. In this case, we are left with: "Trust is a good thing, but control is … "

In order that buildings work, several small and single components must work together. Thus, the absence of a screw connection may lead to failure of the window under extreme conditions such as storm or burglary. This is why our experience spanning several years, the holistic consideration of components and construction materials as well as the comprehensive testing opportunities offer optimal requirements for the realistic and safe evaluation of constructions, materials and function.

TRUST IS A GOOD THING – CONTROL IS A BETTER ONE.

Every human being learns this right at school with homework. We consider ourselves not to be the teacher but a partner and guide that develops strategies to improve the product quality as well as audit systems with a sense of proportion that are practical and viable.
BUILDING AS A HUMAN CULTURAL SERVICE REQUIRES SCIENCE, RESEARCH AND EXPERIENCE. THIS IS PARTICULARLY APPLICABLE TO WINDOWS, FACADES AND DOORS, SINCE THEY HAVE ALWAYS BEEN CONSIDERED TO BE TECHNICALLY AND ARCHITECTURALLY DEMANDING BUILDING ELEMENTS WITH WHICH BUILDINGS GET DESIGN, CHARACTER AND FUNCTION.

"Institut für Fenstertechnik e.V." (ift Rosenheim) was established in 1966 as an association in order to improve the function and quality of windows. As an independent scientific institute, it supports manufacturers, architects, public authorities and building owners with technical services, which, in the meantime, encompass all disciplines. These include tests, research, certification and quality management as well as standardisation, advanced training and publications. In this way, the development of quality products that are suitable for use, environment-friendly and efficient is promoted, in order to improve the living and life of people.

We are guided by the motivation to make products safer, more secure and more suitable for use. This means the construction products can be used safely, reliably and durably in accordance with the purpose of use, remain affordable and benefit people. In the process, this incorporates the knowledge and observance of over 3,000 standards as well as 50 years of experience and the expert knowledge of more than 200 employees.

PRACTICAL RESEARCH, TESTING AND CERTIFICATION FOR QUALITY PRODUCTS

ALL SERVICES FROM A SINGLE SOURCE

- Testing individual performance characteristics as well as a holistic analysis and evaluation of construction materials and building elements
- Surveillance, quality assurance and certification of products as well as management systems
- Executing official and private research projects including the management of funds and the publication of the results
- Compilation of expertises and statements
- Assessment of tenders, construction and detailed solutions
- Calibration of measuring instruments as well as planning and construction of test devices or instruments
- Cooperation in standards committees and technical bodies of associations, authorities, institutions etc.
- Advanced training by seminars, conferences and congresses
- Transfer of knowledge via all forms of media (print, web, presentations, trade fairs, congresses, video, TV, ...)
Wide variety of professional qualifications

- Engineering Sciences
  (architecture, construction biology, construction physics, electrical engineering, industrial engineering, information technology, mechanical engineering, plastics engineering, production technology, wooden construction, ...)
- Natural Sciences
  (aviation and aerospace technology, chemistry, material technology, physics, surface and materials science, ...)
- Commercial Training
  (business administration, merchants for administration/wholesale/banking/industry/marketing communication, tourism, ...)
- Technical Training
  (automotive mechatronics, carpenters, engineering draftsmen, glazing construction, IT specialists, joiners, ...)
- Other
  (communication, foreign language correspondents, history, philosophy, politics, ...)

The comprehensive technical facilities, the skills, innovative drive and reliability of the employees provide assurance and orientation.
COMPETENT

Competence means that we test, research and evaluate building elements and construction materials holistically and practically. A team of scientists, engineers, technicians and experts forms a leading network worldwide. In the process, we consider ourselves as a "Guide" through the maze of regulations and standards. In doing so, we can fall back on an archive containing more than 6,000 standards, technical rules and laws. The comprehensive test and laboratory facilities are constructed, built, calibrated and undergo advanced development in a separate company. This is why the test certificates, general certificates and documents of ift Rosenheim are appreciated and accepted nationally and internationally.

INNOVATIVE

To us, innovation means that we identify trends from technology, society and codes of practice early in time, work out practical solutions and provide information about the same. This includes the development of new test methods and test devices and instruments, guidelines and product certifications as much as publications and training sessions. That contains continuous observation of regulations, standards and technical innovations of various fields of research. We are creative thanks to the teamwork with ift experts from technology, business administration, IT, marketing and communication, and this helps us to think out of the box. Thus, ift customers have the assurance that test methods and technical statements are always based on state of the art in terms of technology and standardisation.
Neutrality and independence are our greatest assets that we ensure by stringent internal and external audits by the DAkkS (German Accreditation Body) as well as several ISO accreditations. The diversity of the customer and industry structure as well as a strong economic base make us independent from the interests of individuals and associations. Confidential handling of customer data, non-disclosure, neutrality and discretion with tests is ensured by the anonymisation of the test bodies, prohibition of photography and discretion zones in the laboratories. On the other hand, we stand for transparent communication of the test and evaluation methods as well as stringent non-discrimination of customers and interest groups during testing, evaluation and time schedules.

We provide assurance by competent and thorough testing of all fundamentals based on evaluation criteria that conform completely with standards. In conjunction with the dual control principle, witness audits and a stringent QM system, we can make reliable, binding and credible statements. When it comes to products that have been tested, evaluated and certified by ift Rosenheim, manufacturers, authorities, architects and building owners can rely 100 per cent on the technical correctness of the characteristic values for the function, safety, security, efficiency, sustainability and health. This is why the test certificates, expertises and certificates of ift Rosenheim have a high level of acceptance nationally and internationally.
THE TESTING OF WINDOWS AND FACADES RANGES FROM STANDARD ASSESSMENTS OF STANDARDISED CHARACTERISTICS, E.G. AS A BASIS OF CE MARKING, TO THE DETERMINATION OF FITNESS FOR USE OF PRODUCTS, IN CONSIDERATION OF INTENDED USE, LOAD AND EXPECTED WORKING LIFE. Product-specific characteristics are included in object tests as well as in expertises. During system testing, the representative selection of test specimen is an important prerequisite for the formulation of consolidated test plans. ift’s selections are based on experience from tests, expertises and standardisations. ift is accredited to validate performance data of complete systems or product lines in a classification certificate. ift disposes of extensive test options for all product characteristics of windows and facades, such as the simulation of driving rain or static and dynamic wind loads, with test specimens of a width up to a maximum of 46 feet (14 m) and a maximum height of 33 feet (10 m).

Naturally, ift is the right partner also for weak-spot analysis in line with developmental projects. Only a careful review of products at a preliminary stage helps to avoid complaints against manufacturers during long-term usage. Due to decreasing developmental intervals, this is of great importance.
Products

- Awnings
- Clean room ceilings
- Conservatories
- Dome lights and roof light domes
- Dormer windows
- Drainage systems
- Exterior window sills
- Facades
- Fixing systems
- Loft ladders
- Sandwich panels
- Solar protection systems
- Supporting structure connection systems
- Roller shutters
- Ventilation devices (Outgoing air and incoming air)
- Windows

Services

- Assessment of individual evidence of performance (Specifications)
- Creation of Expertises, Expert Statements and classification reports
- Evaluations of tenders, designs and detailed solutions
- Holistic assessment and evaluation of products
- Object tests for verification of suitability according to a specific tender
- System and proficiency testing for national and international quality marks, e.g. for RAL Quality Assurance Associations, ift quality mark, DIN-Certco
- Testing according to foreign national standards (e.g. AAMA in the USA)
- Testing on in-house test rigs, e.g. in national and international manufacturer laboratories
- Type test (TT) according to product standard

Tests

- Air Permeability
- Burglar Resistance
- Fire Protection
- Impact Resistance
- Mechanical Durability
- Mechanical Resistance
- Operating Forces
- Resistance to Wind Load (static and dynamic)
- Sound Insulation
- Thermal Insulation
- Ventilation
- Watertightness

Verifications

- Test Report
- ift Evidence of Performance (for classification)
- Expert Statement
- ift-Certificate
As a notified body for doors, gates and accessories, ift Rosenheim is in a position to offer all services necessary for CE marking from a single source.

CHANGING CLIMATIC IMPACTS, INCREASING DEMANDS ON THE SAFETY AND FITNESS FOR USE OF DOORS AND GATES AS WELL AS NEW EUROPEAN REGULATIONS demand testing and evaluation of characteristics carried out by a notified body. ift Rosenheim conducts such tests and provides verification for all characteristics, as required by product standards.

Also contained in the services are special tests determining the resistance of window and door elements to flood water and the shock resistance of glazing and planking exposed to ball impact. Additional tests and inspections are conducted in accordance with customised requirements, and testing programmes matching each application. Complementing the assessment of individual performance characteristics according to product standards, are product certifications, based on ift certification programmes for proof of superior product quality and enhanced characteristics.

Accessories and vendor parts for doors and gates are all tested, classified and certified according to the same procedure.
Products

- Accessories and vendor parts for doors and gates, such as glazings, infills, panels, fittings, gaskets, blank doors and materials
- Entrance doors of residences
- Factory gates
- Front doors
- Front doors of arbors
- Garage doors
- Internal doors
- Special doors with specific requirements

Services

- Creation of Expert Statements
- Evaluations of tenders, designs and detailed solutions
- Floodwater resistance of windows and doors
- Proficiency tests for national and international quality labels, e.g. for the RAL Quality Assurance Association
- Internal Doors, Windows and Front Doors and plastic-window profile systems as well as for ift certifications
- Quality assurance of doors and gates with custom-made surveillance and certification programmes
- Special customised tests
- Testing on in-house test rigs, e.g. in national and international manufacturer laboratories
- Type Test (TT) for doors and gates as a prerequisite for CE marking

Tests

- Air Permeability
- Burglar Resistance
- Impact Resistance
- Mechanical Durability
- Operational Force (Gates)
- Resistance to Climatic Conditions
- Resistance to Wind Load
- Safety in Use (Gates)
- Sound Insulation
- Thermal Insulation
- Watertightness

Verifications

- Test Report
- ift Evidence of Performance (for classification)
- Expert Statement
- ift-Certificate
IN THE FIELD OF CONSTRUCTION AND BUILDING, GLASS IS USED IN A VARIETY OF WAYS, NOT ONLY SERVING ITS CLASSICAL PURPOSES OF TRANSPARENCY, THERMAL INSULATION AND BUILDING ENVELOPE but also as a means of protection against the sun or against falls and as a structural component. For these characteristics, different forms of verification are necessary. This includes the determination of long-term mechanical performance and mechanical strength, both of which are important for the constructional use of glass.

Tests performed by ift Rosenheim include all necessary test procedures and verifications for glass and the components of which e.g. insulating glass units are composed. ift's holistic approach ascertains that all product characteristics which are relevant to an application are tested and assessed. This method assures manufacturers, clients and users that all aspects of use are considered and that all tested products feature the required fitness for use and quality. In compliance with manufacturers’ requests, ift offers support for additional measures for glazing and the required products related to quality assurance as well as to production and on-site implementation.

ift is notified to offer all necessary forms of verification for the CE marking of glass products. ift's full-scale staff competence regarding CE marking and its presence in all relevant European committees warrant verifications for manufacturers, which ensure high acceptance in the European market. In addition, tests to the standards of foreign certifications bodies (e.g. CEKAL) are possible.

ift Rosenheim is a notified body and a testing, surveillance and certification body for glass products, accredited by the building supervisory authority. The high quality and acceptance of ift Rosenheim’s verifications ensure the recognition of their results for national approval as well as approval of individual cases and European-wide CE marking.
Products

- Coated glass for solar protection and thermal insulation as well as for decorative designs
- Components like spacers and desiccants
- Facade tiles
- Fire resistant glass
- Float glass
- Heat strengthened glass
- Insulating glass units (IGU)
- Laminated safety glass and laminated glass
- Safety barrier, accessible and single-point supported glazing
- Safety glazing for special applications (anti-vandal resistant, bullet resistant, anti-bandit resistant and explosion resistant glazings)
- Sealants for the production of IGU
- Toughened safety glass (TSG)

Services

- Determination of strength and characteristic values of materials
- Quality assurance of glass products with the help of custom-made surveillance and certification schemes
- Support for the approval of individual cases and general building supervisory approvals
- Test and quality control for RAL Quality Assurance Association Insulating Glass Units as well as for CEKAL
- Tests for glass products in the field of building as a prerequisite for CE marking
- Testing according to foreign national standards (e.g. AAMA in the USA)
- Verification of characteristic values of building physics through calculation and measurement
- Verification of long-term performance and characteristics of building physics of solar protective devices in inter-pane separations
- Verification of stability and testing of structural components

Verifications

- Test Report
- ift Evidence of Performance (for classification)
- National Technical Test Certificate according to the Regional Building Code
- ift-Certificate
- Certificate of Constancy of Performance of the product (CE)
ift Rosenheim has as its disposal all the necessary laboratory equipment plus the expert knowledge to characterise construction material according to their purpose designated by the manufacturers and to value the interaction in window and facade in a later area of application.

**ESSENTIALLY, THE DURABILITY OF CONSTRUCTIONAL PARTS IS DETERMINED BY THE SINGLE COMPONENTS WHICH INCLUDE ALL MATERIALS NECESSARY FOR THE MANUFACTURING OF WINDOWS, FACADES, DOORS AND GATES.** The testing of building materials does not only include the determination of material identification data, but also the assessment of the durability and their interaction with other construction materials.

ift Rosenheim’s staff members have all the necessary laboratory equipment available and they form a team of experts, qualified to characterise the great variety of materials, to test and determine important material characteristics, and to test the materials and their fitness for use according to the purpose designated by the manufacturers. Thus, test methods are based not only on national and European standards but also on guidelines and test methods built on ift’s substantial experience. This long-time experience in the field of windows and facades as well as the testing of building materials is a guarantee for manufacturers that all practical factors which are important for implementation are being considered. For new products for which there are currently no existing standards, application orientated in-house methods are developed. Cooperation with significant quality associations as well as ift’s own certification programmes offer support for product quality assurance related to manufacturing and usage of construction materials.
Products

- Adhesives for the application of building components
- Aluminium frame profiles, wood, plastic and composite material e.g. metal-plastic composite profiles, laminated profiles, and plastic profiles with their reinforcement systems
- Assembly foam
- Wood coating systems and finishing processes for all materials
- Connection elements for window frames and transom-mullion-facades
- Fasteners (screws, dowels etc.) for the mounting of building components
- Glazing blocks and glass supports
- Mechanical strength for SSGS
- Sealants and sealing profiles
- Structural sealant glazing systems (SSGS) and adhesives
- Systems and materials for the sealing and insulation in the installation joint
- Timber and derived timber products

Services

- Creation of Expert Statements
- Determination of material identification data e.g. values for mechanical strength, UV-resistance, colour
- Determination of performance characteristics within the scope of European product standards
- Evaluations of tenders, designs and detailed solutions
- Microscopic and chemical material analysis
- Object tests for verification of suitability according to a specific tender
- Quality assurance of materials and building materials with custom-made surveillance and certification programs
- Suitability of timber types and wood adhesives for windows manufacturing
- Suitability tests for verification of usability related to usage in building components
- Support for the approval of individual cases and general building supervisory approvals
- Test of the behaviour of materials in direct contact
- Testing according to foreign national standards (e.g. AAMA in the USA)

Tests

- Compatibility of Edge Sealant of IGU
- Compatibility of Sealants
- Long-term Performance under Mechanical Load and/or Temperature and Moisture
- Mechanical Performance of Metal Profiles with Thermal Barrier
- Resistance to Temperature Cycles
- Tensile Shear Strength of Wood Adhesives

Verifications

- Test Report
- ift Evidence of Performance (for classification)
- Expert Statement
- National Technical Test Certificate according to the Regional Building Code
As a notified body for fittings and accessories, ift Rosenheim is in a position to offer all services necessary for CE markings from a single source. This includes tests as well as surveillance and certification.

A BURGLARY OCCURS EVERY THREE SECONDS IN GERMANY AND MOST OF THE TIME BURGLARS FORCE OPEN WINDOWS AND DOORS. Additionally, today’s globalisation and the resulting consequences lead to a feeling of insecurity and accordingly there is a growing tendency to attempt to increase the level of safety at home. The construction industry has witnessed a growing interest in safety related products.

The burglary resistance capabilities of almost all products with safety features in Germany are tested by ift Rosenheim. ift Rosenheim also chairs the corresponding national and European Standardisation Committee and is represented in the Fox Club in which Europe’s leading burglary inspection authorities have joined together. These factors ensure the high-level of acceptance of ift’s testing results all over Europe.

Complementing these tests, ift also offers product certifications based on ift certification programmes, which verify superior product quality combined with improved product characteristics. Burglary resistant building components, based on ift’s certification programmes are accepted in the KPK directories (KPK, Kommission Polizeiliche Kriminalprävention, Commission for Criminal Prevention) of the Landeskriminalämter (Land Offices of Criminal Investigation) and referred to by the clients’ council. In addition to the tests, ift offers material-related evaluations of construction details and safety concepts. Beyond this, ift performs tests of door and window fittings – from mortise dead locks to window handles.
Products

- Anti-vandal and anti-bandit resistant glazings and infills
- Building components preventing falls according to TRAV (Technical regulations for glazings which prevent falls)
- Burglary resistant doors, gates, windows, roller shutters, grids and facades
- Emergency and panic room door locks
- Lever door handles, profile cylinders, locks, hinges
- Locking and entrance systems
- Mechanical retrofitting products for windows and doors
- Prison room doors and jailbreak preventing building components
- Safety fittings for windows, doors and gates
- Special tests for revolving doors, single access entry systems, safety storage cabinets, key boxes etc.
- Wall construction components and non-loadbearing partition walls

Services

- Creation of assessments and Expert Statements
- Evaluations of tenders, designs and detailed solutions
- Object tests for verification of suitability of a specific tender
- Quality assurance with custom-made surveillance and certification programs
- Testing of break-in prevention characteristics of building components, locks, and fittings as well as shock resistance of glazings and panels against ball impact
- Testing of building components preventing falls with test specimen and real objects according to TRAV
- Testing of object specific safety concepts for building components

Verifications

- Test Report
- ift Evidence of Performance (for classification)
- ift-Certificate
- Certificate of Constancy of Performance of the product (CE)
Our complete service package contains the pre-installation preparation of a wall opening which guarantees quick and fast handling of all laborious tests. Our close collaboration with leading authorities on fire safety in Europe ensures Europe-wide acceptance of results.

**THE IFT CENTRE FOR FIRE TESTING IS A PARTNER FOR MANUFACTURERS OF FIRE PROTECTION BUILDING PARTS SUCH AS DOORS, GATES, FACADES, GLAZING, ACCESSORIES AS WELL AS CONSTRUCTION MATERIALS.** We offer a quick and flexible handling of fire testings as well as competent support for the building supervisory approval procedure and the CE marking. Services include the investigation of fire performance characteristics, fire resistance, and smoke-tightness of materials. ift’s Test Reports are the prerequisite for conformity certificates, general licenses of the building supervisory authority as well as classification reports and approval in individual cases.

ift is represented in national and international standardisation commissions and committees of experts of DIBt (German Institute for Building Technology) where ift experts offer their practical experience drawn from expertises on fire safety, expert statements, and surveillances. To manufacturers, developers, and clients test reports and certificates of ift Rosenheim provide the reliability of an internationally recognised, notified, and accredited testing, surveillance, and certification authority. Close collaboration with partners like UL (Underwriters Laboratories) and leading authorities on fire safety in Europe ensure not only Europe-wide acceptance of results. All of ift Rosenheim’s documents provide the basis for future CE marking.

ift’s entire knowledge which includes all product characteristics, benefits the holistic treatment of products, and enables a reliable evaluation of the fitness for use – the decisive factor regarding practical application.
Products

- Accessories and fittings
- Building materials
- Building sealings
- Cable and pipe insulation
- Fire protection curtains
- Fire resistant doorsets (doors and gates)
- Fire resistant glazing
- Inspection opening locks
- Non-loadbearing walls, ceilings
- Safety storage cabinets
- Sealants
- Smoke and heat control systems
- Smoke control doors and shutters

Services

- Creation of Expertises, Expert Statements and classification reports
- Determination of durability and self-closing characteristics
- Evaluations of tenders, designs and detailed solutions
- Fire performance characteristics tests according to national, European and international standards, such as the UL standard of the United States
- Measurement of leakage rate and smoke control
- Supervision of production and implementation
- Support for approval of individual cases and general building supervisory approvals
- Testing of all kind of building materials
- Testing on in-house test rigs, e.g. in national and international manufacturer laboratories
- Type Test (TT) according to European standards

Tests

- Ability to Release
- CE Marking
- Certification and Surveillance of Products
- Fire Performance Characteristics
- Mechanical Durability
- Resistance to Fire
- Smoke Control

Verifications

- Test Report
- ift Evidence of Performance (for classification)
- Reports on extended field of application (EXAP)
- Certificate of Constancy of Performance of the product (CE)
- National Technical Test Certificate according to the Regional Building Code
- Expert Statement for application for approval of individual cases
- Summarizing Expert Statement for approval
Comprehensive and intelligently conceptualized test facilities enable extremely fast and flexible test performances, especially for large-sized facades, gates, ceilings and prefabricated wall elements.

THERE IS AN INCREASING AWARENESS TODAY FOR THE NEED OF PROTECTION AGAINST HARMFUL NOISE POLLUTION AND THE PROTECTION OF THE PRIVACY AT HOME. To guarantee adequate sound insulation, the use of sound insulating building elements such as windows, doors, walls, and ceilings is necessary and will become more and more important in the future.

ift Centre for Acoustics Rosenheim (LSW) has all the required test rigs available, plus the expert knowledge to test the sound insulation of building components. Such components include windows and doors and even complete facades, interior and exterior walls, roofs and ceilings. With the help of bridge cranes (holding a maximum load of 24.6 long tons in a spacious testing hall) heavy components can be quickly, safely, and reliably lifted into the test rigs to be tested.

In addition to laboratory tests, ift offers noise-level measurements for buildings throughout Europe. Since its founding, ift Centre for Acoustics has attained the highest recognition for technical competence as well as for professional reliability and flexibility.
ift Centre for Acoustics has been accredited by DIBt (German Institute for Building Technology) for tests according to the Landesbauordnung (Regional Building Code) and the German Bauproduktengesetz (Construction Products Law). Ift is an approved VMPA (Association of Material Testing Institutions) test body and authorised to perform quality inspections according to DIN 4109.
THERMAL REQUIREMENTS FOR BUILDINGS ARE DETERMINED BY THEIR COMPONENT CHARACTERISTICS. Extensive exchange of public opinion as well as general political conditions will provide further improvement of components in the field of building physics.

At ift Rosenheim, a competent team of engineers and physicists is focused on practical skills to determine thermal and energetic parameters for windows, facades, doors, gates and accessories. This applies for official verification procedures as well as for examinations during developmental stages. ift’s direction of and participation in national and international standardisation committees guarantees that tests and calculations in the field of building physics always remain current. ift’s excellent technical reputation constitutes the high national and international acceptance of its verifications.

Existing codes of rules and regulations or standards do not always offer answers to all questions. This is why ift is working out proposals for practical solutions, adapted to the needs of the industry and supporting manufacturers to solve and complete their tasks.

Tests, calculations and expert statements of ift Rosenheim provide acceptance of a recognised testing, surveillance and certification authority (PUZ Stelle, Bay 18) in compliance with technical construction regulations and a notified body in Europe (EG reference number 0757) for thermal and solar verifications.
Products
- Doors
- Facades
- Frame profiles and profile systems
- Gates
- Insulating glass units
- Mountings of building components
- Panels/infills
- Roller shutters and roller shutter boxes
- Solar protection systems and shutters
- Special building components
- Synthetic and insulating material
- Windows

Services
- Calculation of isothermal lines as well as surface temperatures to state temperature factor and dew point performance
- Calculation of one- and two-dimensional moisture curves
- Calculation of two- and three-dimensional thermal bridges
- Creation of Expertises and Expert Statements
- Determination of luminous and solar characteristics of insulating glass units
- Determination of parameters of luminous and solar characteristics (g-value etc.) of solar protection equipment as heat protection in summer
- Determination of thermal characteristics (U-value etc.) through testing and calculation
- Evaluations of tenders, designs and detailed solutions
- Object tests for verification of suitability according to a specific tender
- Special tests
- Verifications related to CE marking

Tests
- Dew Point Performance
- Emissivity
- Light Transmittance and Reflectance
- Solar Protection
- Thermal Insulation

Verifications
- Test Report
- ift Evidence of Performance (for classification)
- Expert Statement
THE DEMAND FOR SUSTAINABLE AND ENERGY-EFFICIENT BUILDINGS WITH CERTIFICATES (DGNB, BNB, LEED OR BREEAM) IS INCREASING CONSTANTLY. This is why ift Rosenheim supports manufacturers of windows, facades, doors, gates and glazing with the necessary verifications and certificates. These documents support the stakeholders (e.g. customers, suppliers, employees, architects, planners and building certifiers) with valuable information on ecological, social and economic aspects. This diversity of information is compiled systematically and neatly in the ift Product Passport for Sustainability such that the necessary characteristic values for the various building certification systems (DGNB, BNB, LEED and BREEAM) are easily available.

As an accredited programme holder for EPDs, ift Rosenheim can prepare the necessary certifications such as e.g. EPDs, Life Cycle Assessments or VOC Certificates. The data obtained provide additional important information for establishing an environmental management system as well as the ecological optimisation of products and production. Particularly the analysis of the life cycle provides significant benefits with respect to the quality, pricing, innovative capability, risk minimisation as well as the publicity-related communication on the subjects of environment and sustainability.

Special certifications such as the PEFC certification of sustainable forest management or the VOC certification programme for classification of emissions from construction materials make sure that a finished end product does not cause or causes only minimum stress for the environment and manufacturers and consumers can rely on the sustainability of a certified product.

"Only to the extent that Nature can tolerate" – ift Rosenheim supports sustainably oriented companies with the optimisation of products and production by competence, practicality as well as national and international certificates.
Environment and Sustainability

Environmental Product Declaration (EPD) as a sample EPD or unique corporate EPD

All construction products with PCR (others on request)

Product Category Rules (PCR)

- Coating, preservation and sealing systems
- Doors, gates, locks and hardware
- Drives for building elements
- Fire safety components
- Flat glass in Civil Engineering
- Mounting of building components
- Reinforced steel
- Semi-finished products and profiles
- Windows, facades, glass roofs, window strips and NSHEV elements

Life Cycle Assessment (LCA)

All construction products

ift Product Passport for Sustainability

All construction products

Certification of sustainable timber industry (e.g. PEFC)

All wood products

VOC Certificates (volatile organic compound) according to the AgBB system and the French evaluation system

VOC Certification for internal doors, windows and other construction products

Cooperation in standardisation, round table for sustainable construction, ÖKOBAUDAT user group

Verifications

- EPD
- ift Product Passport for Sustainability
- VOC Certificate

Our co-workers consult builders, investors and project developers to sustainable buildings and DGNB certification.

Environmental Impact

Abiotic Depletion Potential

Acidification Potential

Environmental Product Declaration

Eutrophication Potential

Global Warming Potential

Non Renewable Primary Energy

Ozon Depletion Potential

Photochemical Ozone Creation Potential

Renewable Primary Energy

Sustainability

Use of Fresh Water
The research projects of ift Rosenheim are user-oriented, according to our mission statement “Practical problems solved for practical use”.

The participation of industry partners ensures practice-oriented research and they benefit from this headstart of knowledge. A comprehensive technical basis and the collaboration of researchers, engineers and practitioners in close cooperation with universities and institutes guarantee the result-oriented treatment of state-of-the-art assignments. Research results may be used in form of construction recommendations, standards, guidelines or data-sheets.

Individual companies are accompanied within the scope of contract research for the (further) development of their products. The results of the research projects belong exclusively to the client. ift Rosenheim provides the entire project management – from analysis and applications for funding from various sources to the publication of results and the scientific support during market launch.
Products

- Contract research
- Public research

Services

- Handling of research projects, based on the complete range of technical services by ift Rosenheim
- Project coordination
- Support with applications for funding
- Support with selection of appropriate research partners

Areas of Research

- Assembly
- Fire Protection
- Freedom from Barriers
- Online Tools
- Security
- Solar Shading
- Sound Insulation
- Sustainability
- Thermal Protection
- Universal Design
- VOC Emissions

Publications

- Research report
- Guideline
CERTIFICATIONS OF IFT ROSENHEIM ARE HELD IN HIGH REGARD BY CONSUMERS, MANUFACTURERS AND RETAILERS SINCE THEY PROVIDE AN HIGHER LEVEL OF CREDIBILITY THAN PR STATEMENTS FROM WITHIN A COMPANY. This is based on the recognition as an notified body and the extensive experience in the field of windows, facades, doors and accessories. Our convenorship of important standardisation committees ensures a clear headstart in terms of knowledge, offering clients decisive advantages related to the handling and interpretation of product standards as well as to Europe-wide mandatory CE markings.

Where no third party surveillance is required by the building supervisory authorities, ift’s product certification means a recognised verification of controlled quality and standard conformity. Due to our proven industry expertise we can make use of a “flexible accreditation”, thus enabling a fast and nonbureaucratic development of new product or procedure-specific programmes.

Collaboration with national and international certification bodies ascertain mutual recognition of tests, surveillances and certificates. This helps to avoid multiple tests and surveillances. The following advantages are provided by ift:

- Customer-oriented, non-bureaucratic and pragmatic services
- Industry and product competence of auditors
- Efficient combination of product and company auditing
- International recognition of ift certificates
- Certificates and links to other companies can be directly accessed from ift’s website – ready to be used by developers, manufacturers and clients

Certification by ift Rosenheim ascertains European-wide acceptance. Industry and expert knowledge of auditors and the principle of "flexible accreditation” provide the basis for competent and practical service.
QUALITY MANAGEMENT (ISO 9001)
demonstrates awareness for quality, enhances the company image and improves operating efficiency as well as failure rate – both factors raise the return

ENVIRONMENTAL MANAGEMENT (ISO 14001)
shows responsibility for humans and the environment, reduces costs and environmental risks due to less waste and resource consumption

ENERGY MANAGEMENT (ISO 50001)
enhances efficiency and saving of energy

OCCUPATIONAL SAFETY MANAGEMENT (BS OHSAS 18001, SOON ISO 45001)
accomplishes a high level of safety, satisfaction and work motivation of the staff as well as improved operational processes

National and international recognition of ift Certification

Verifications

- ift-Certificate
- Certificate of Constancy of Performance of the product (CE)
- Certificate of Conformity (Ü Marking according to Regional Building Code)
THE IFT ROSENHEIM AND RAL QUALITY ASSOCIATIONS HAVE SHAPED THE QUALITY CONTROL OF PRODUCTS FOR MANY YEARS. Product-specific RAL Quality Control Systems form the preconditions for a long-term success in national and international markets. The quality marks serve the manufacturers as a credible proof for high product quality and usability. The terms and regulations for quality and tests are being developed similar to standardisation procedures and are binding for participating companies. The guidelines include provisions for all characteristics, which are crucial for the fitness of use and the quality of a product, and therefore partially exceed minimum statutory requirements.

The principal requirements of RAL Quality Control contain the comprehensive system testing of products, based on currently valid standards and guidelines. A neutral test and surveillance body examines products and parts as well as the company-owned production control on-site, including sampling of comparative laboratory tests. RAL Quality control ranges from a receiving inspection to the assembly of building components – with focus on product control.

For many years and various RAL Quality Associations, ift Rosenheim has been a competent and reliable partner: as neutral testing and surveillance body for verifications and testing and in support of manufacturers and RAL Associations regarding technical questions.

Contrary to legally required initial inspections, ift and RAL Quality systems ascertain durable product quality.
Services

- Company support during adoption of RAL Quality Control
- Performance of system tests based on quality/test regulations
- Technical support for preparation of RAL Quality Regulations and Test Specifications and guidelines
- Third party surveillance related to quality control and a review of samples in our laboratory
- Usage of results of surveillances for legally required verification and marking

Quality Regulations

- RAL Quality Regulations and Test Specifications for burglary resistant steel doors
- RAL Quality Regulations and Test Specifications for insulating glass units
- RAL Quality Regulations and Test Specifications for internal doors made of timber and derived timber products
- RAL Quality Regulations and Test Specifications for windows, doors, facades and conservatories

Quality Associations

- Windows, external pedestrian doors, facades and conservatories (www.window.de)
- Internal pedestrian doors (www.guetegemeinschaft-innentueren.de)
- Plastic window profile systems (www.kunststoff-fensersysteme.de)
- Insulating Glass Units (www.gmiev.de)
- Doors, gates, frames (www.ttz-online.de)

Verifications

- RAL Evidence of Suitability
- Certificate of proper factory production control
WINDOWS, FACADES, DOORS AND GATES ARE COMPLEX BUILDING COMPONENTS
WITH A VARIETY OF DIFFERENT REQUIREMENTS AND TASKS. The planning process, the
specialisation of subcontracted work and the integration of building components into
a building as well as the on-site construction quality, lead to a variety of interfacing steps
harbouring damage potential. Even more so, since construction processes today are governed
by enormous cost and time related pressure.

ift Rosenheim acts as an expert authority – clarifying technical circumstances and the cause of
damage. The involvement of ift experts at an early planning stage of a project could often
prevent legal issues. Long-term practical experience, holistic treatment of windows and exter-
rior walls and the extensive range of testing options of ift Rosenheim provide optimized pre-
requisites for the development of practical and economical solutions to rectify damage.
New findings and insights from damage analysis are used to prevent damage of future projects
and they are communicated in form of publications, data sheets, guidelines, seminars and they
are taken into account during test procedures as well as for the quality control of products.
Services

- Creation of Expertises and Expert Statements at the stages of planning and building, at the acceptance of new constructions, at refurbishment, in case of damage as well as the technical evaluation of an existing building
- Technical information via ift hotline
- Technical support for tenders, detail and operation planning as well as for the creation of refurbishment concepts

Analysis + Evaluation

- Building-physical and material-specific relations in conjunction with building elements
- Structural evaluation of windows, facades, doors, gates and conservatories made of all materials and situated in all stages of the life cycle
- Testing of assembly and installation details as well as of sealing and window wall connections

Areas of Activity

- Air Permeability
- Assembly
- Dew Point Performance
- Emergency Exit Devices
- Fixation
- Freedom from Barriers
- Operating Forces
- Sealing
- Thermal Insulation
- Visual Assessment
- Wind Load

Verifications

- Expertise
- Expert Statement
TESTING AND MEASURING FORM THE BASIS OF PRODUCT DEVELOPMENT AND QUALITY IMPROVEMENTS; HENCE, THEY ARE INDISPENSABLE FOR THE FACTORY PRODUCTION CONTROL (FPC). This is also a requirement stipulated by building supervisory authorities for the CE marking and quality management systems in accordance with ISO 9001 et. seq. This is why important parameters must be tested and measured regularly in order to ensure the quality sustainably.

In 50 years of testing work, ift Rosenheim has developed numerous test methods and test equipment for routine use in the laboratory, and hence, it can offer a large number of measuring and test instruments to companies and test laboratories. Its range of services stretch up to the engineering and design of complete laboratory and test centres as well as training for tests conforming to standards including the evaluation of the test results.

Working jointly with national and international standardisation committees offers the assurance that all test methods, test equipment and evaluations always meet the current standards. The ift service also includes maintenance or instructions for functional testing, complying with cleaning and lubrication work, replacement of wear parts as well as software updates that are implemented with the help of remote diagnostics and thus, save costs.

The ift calibration laboratory is accredited in accordance with EN ISO 17025 for important parameters, monitored by DAkkS and even authorised to calibrate test equipment of certified test institutes. Test equipment that meet the relevant calibration requirements are also manufactured by ift Rosenheim.
Products

- Climatic simulators for radiation, heat, cold and humidity
- Computer data logging systems
- Durability test rigs for hinges, locks, doors and windows
- g and U value test rig
- Radiation test rigs
- Smoke control test rigs
- Tension and compression testing machines
- Test rigs for air permeability, wind load and watertightness

Services

- Auditing technical competence of lab facilities according to DIN EN 17025
- Calibration of company-owned test rigs and measuring tools
- Development of measurement and test facilities
- Training and orientation of testing staff

Characteristics

- Mechanical Durability
- Mechanical Load
- Permeability of Joints and Watertightness
- Resistance to Climatic Conditions
- Sun Exposure
- Thermal Insulation
- Wind Load

Verifications

- CE Declaration of Conformity
- Calibration Report
- Reports of factory and DAkkS calibration
- Instructions for use
- Testing software
THE CALIBRATION AND MAINTENANCE OF THE TEST DEVICES AND MEASUREMENT FACILITIES ARE IMPORTANT REQUIREMENTS IN ORDER TO USE MEASURING INSTRUMENTS PROPERLY AND IN CONFORMITY WITH THE STANDARDS. Calibrating the test devices and measuring equipment is necessary to ensure the functionality, measurement accuracy and conformity with the standards. Regular calibration as well as software updates support the test laboratory with the selection of suitable test equipment so that the test methods always meet the requirements specified by standards, whether they are EN, ISO standards or in accordance with special national requirements.

With specific procedures and traceable calibration standards, ift Rosenheim can calibrate test and measuring instruments so that the calibration is traceable. Such a calibration is the basis for the test and measuring instruments of an accredited test laboratory in accordance with DIN EN / ISO 17025. The calibration laboratory has been accredited by the DAkkS (German Accreditation Body) since 2013 in accordance with DIN EN / ISO 17025 for several measurement parameters. In addition, ift Rosenheim has been a member of the DKD (German Calibration Service) since 2014.

The software of measuring or test instruments procured from ift Rosenheim can generally be updated to the current version via remote maintenance so that continuous conformity with the necessary test standards is ensured. This is why the test results obtained on test rigs calibrated by ift Rosenheim can also be used for verifications under building law.

At ift, we provide the experience gained over several years as a service in on-going calibration of more than 1000 in-house measuring and test instruments.
Services

- Calibration of in-house test rigs and measuring instruments
- Data acquisition and evaluation systems including training
- Servicing and Maintenance
- Software update with remote maintenance

Measurement parameters (selection)

- Flow rate
- Force
- Length
- Moisture
- pH and value of conductivity
- Pressure
- Sound
- Speed
- Temperature
- Thermal transmission
- Torque

Verifications

- DAkkS Calibration Certificate for accredited measured values acc. to the accreditation certificate
- Calibration Evidence
- Factory Calibration Certificate
PRACTICAL TRAININGS FOR STAFF MEMBERS ARE A PIVOTAL PREREQUISITE FOR THE SUCCESS OF A COMPANY. THEREFORE, “EDGE BY KNOWLEDGE” ARE THE GUIDING PRINCIPLES OF THE IFT ACADEMY. Seminars, technical conferences and individual in-house trainings of IFT Academy guarantee first-hand knowledge and competence. Our speakers all are experts in their fields and proficient with practical tasks.

Communicative interaction between subject specialists of all disciplines and auditing participants leads to a personal exchange of news and experience in the field of technology, research, testing, standardisation and expert opinion. Concrete commercial needs and requirements of the economy can be instantaneously and competently discussed and questions can be addressed and clarified. This is the foundation of successful professional training – in line with the requirements of the industry. Participation in IFT Events means nationally and internationally recognised evidence of technical competence.

The objectives of our speakers are to:

- update existing basic knowledge
- intensify technical knowledge of specialists
- discuss urgent issues of the industry and offer solutions
- expand expert competence

Cooperation with leading institutions in research, legislation, science, education and expert organisations establishes a unique pool of speakers and guarantees the latest standard of knowledge.
CONFERENCE AND CONGRESSES
- ift Conference for Timber and Timber Metal Windows
- International ift Fire Protection Forum
- International Rosenheim Window and Facade Conference
- Rosenheim Door Conference

BASIC, ADVANCED AND EXPERT TRAININGS ON THE FOLLOWING SUBJECTS
- Building law
- Building physics
- Construction and assembly
- Load-bearing structure theory
- Materials
- Standardisation and quality

TECHNICAL DEGREES
- ift Assembly Specialist
- ift Electrician
- ift Safety Expert
- ift Specialised Engineer
- ift Specialised Technician
- ift Ventilation Expert

IN-HOUSE TRAININGS
- Flexible selection of speakers and coordination of topics
- Individual adjustment of topics to meet requirements and special issues of different companies
- Venue either on company premises or at ift Rosenheim

Verifications
- Confirmation of Participation
- Certificate for successful completion of an ift degree

Topics
- Assembly
- Burglar Resistance
- Calculation Methods
- Electrical Building Components
- Fire Protection
- Freedom from Barriers
- Security
- Sound Insulation
- Sustainability
- Thermal Insulation
IFT ROSENHEIM TAKES ON THE RESPONSIBILITY OF SHARING ACQUIRED KNOWLEDGE. AS A COMPETENT AND NEUTRAL INSTITUTION, IFT ROSENHEIM ENJOYS AN OUTSTANDING REPUTATION AS AN UNBIASED AND OBJECTIVE SOURCE OF INFORMATION, BY EXPERT AND PUBLIC MEDIA. Ift Rosenheim’s publications represent substantial expert knowledge, coordinated with relevant groups of experts and they are always documenting state-of-the-art technology. More than 150 scientists, engineers and practical persons of different fields of expertise work on this – each expert on his specialisation. Communications and information have a special status as a neutral and objective source of information for technical and public media. With it, all relevant types of media are used (print, online, trade fairs, congresses, workshops, radio and television, audiovisual media).

ift Rosenheim as a neutral technical service provider maintains a complex network that covers all areas of building envelopes and building components in the ift terms of references. At industrial trade fairs like the BAU in Munich, FENSTERBAU FRONTALE in Nuremberg and the R+T Stuttgart ift Rosenheim presents important subjects at special exhibitions, congresses and lectures. The support of innovations, product quality and user safety is paramount. It is clearly shown on national and international trade fairs with partners from industry, science and associations.
PRESS WORK
- National and international technical-scientific publications in more than 40 countries
- Press information for public media and broadcasting editorial offices
- Production of videos

TECHNICAL LITERATURE
- Archive, containing important technical codes of rules and regulations and standards
- Newsletter „ift infoline“ and „ift impulse“
- Publication of guidelines, data sheets and technical information
- Research reports and scientific studies

INFORMATION
- Recommendation of technical literature and online information service
- Technical information for window, facade, door and gate manufacturers, craftsmen, architects and clients

TRADE FAIRS
- Lectures, accompanying, programmes, expert conferences, special exhibitions
- Special exhibitions during key trade fairs (BAU Munich, R+T Stuttgart, FENSTERBAU FRONTALE Nuremberg)

WEBSITE
- Download of technical literature
- FAQ and glossary for ift-members
- Research and figure archive
- Services of subjects and user tips
- Substantial list of links to associations, institutes, universities, press, manufacturers etc.
- Support and online tools
- Technical publications and press information

Publications
- Press releases
- Press articles
- Research reports
- Guidelines
- Technical information

Topics
- Assembly
- Automation
- Burglar Resistance
- Fire Protection
- Protection of the Environment
- Quality
- Research Results
- Sound Insulation
- Thermal Insulation
- Universal Design
AS AN ACCREDITED AND NOTIFIED BODY, IFT ROSENHEIM HAS COMPREHENSIVE EXPERIENCE IN HANDLING TECHNICAL CODES OF RULES AND REGULATIONS. Just shortly after establishing the institute, work commenced on incorporating the experience gained from the field of testing into the formulation of codes of rules and regulations for the industry. The employees of ift Rosenheim have participated since years with considerable time and effort in all relevant European and German standardisation committees; the European standardisation committee for windows and doors is already being managed for the third consecutive term in office by the Director of the Institute at ift Rosenheim, Prof. Ulrich Sieberath.

Beyond the technical work of standardisation, ift Rosenheim is also making proposals in close cooperation with the trade associations of the industry in the formulation of codes for rules and regulations and is trying to support the policy with its technical and professional skills. Since the framework conditions are being set increasingly at the European level, the strong and efficient European networking of the Institute is paying rich dividends over several years of cooperation in the most diverse committees.

The employees of ift Rosenheim have several years of their own experience and background knowledge from the work done on standardisation.
Products

- Commentary on the EN 14351-1 product standard
- In-house training and presentations
- News on standards
- Online standards portal "Windows – Doors – Gates"
- Technical publications and data sheets

Services

- Cooperation in German and European standardisation committees
- Formulating codes of practice and codes of rules and regulations
- Information for members and customers on new or amended regulations
- Online technical dictionary
- Support for design-related issues
- Support for the implementation of requirements from codes of rules and regulations

Guidelines (selection)

www.normenportal-fenster-tuere.de
INTERNATIONAL ACTIVITIES

ift Network:

- Austria: IBS, HFA
- Belgium: Belgian Building Research Institute, Belgian Construction Certification Association
- Canada: University British Columbia
- Denmark: DTI
- Europe: European Accreditation, Joint Research Centre
- Finland: VTT
- France: FCBA, CSTB
- Germany: DAkkS, DIBt, DIN CERTCO
- Global: IAF, ILAC
- India: IFF, GSI
- Italy: IG
- Netherlands: TNO
- Poland: ITB
- Sweden: SE
- Switzerland: University of Applied Sciences Bern, VKF
- USA: LADBS, AAMA, UL

www.ift-rosenheim.de/international
ift LOCATIONS

HEADQUARTERS AND CENTRAL LABORATORY
Theodor-Gietl-Straße 7–9
83026 Rosenheim

CERTIFICATION AND SURVEILLANCE BODY
Tegernseestraße 11
83022 Rosenheim

ift ACADEMY
Tegernseestraße 11
83022 Rosenheim

NOTIFIED PRODUCT CERTIFICATION BODY
FOR FIRE SAFETY
Tillystraße 2
90431 Nürnberg

TECHNOLOGY CENTRE
Am Oberfeld 21
83026 Rosenheim

MESSTEC – MEASUREMENT AND TESTING TECHNOLOGY
Tegernseestraße 14
83022 Rosenheim

LABORATORY FOR BUILDING ACOUSTICS
Lackermannweg 26
83071 Stephanskirchen (Kragling)

FACADE TEST RIG DEGGENDORF
Großwalding 3
94469 Deggendorf