

ATTAIN  RTC

Assurance Through Innovation

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Excellence Assured

UKAS Accreditation Achieved



27297

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Attain RTC is a Research, Materials Testing and Classification laboratory providing services to the construction products sector.

All services are delivered from our state-of-the-art 40,000 sqft construction materials testing laboratory using the latest technology and software to deliver comprehensive and efficient testing services to our customers. Our testing services include fire resistance testing, reaction to fire, acoustic properties and mechanical testing. Our goal is to provide a safe working environment for both our employees and visitors alike, whilst setting the industry standard for service we can be proud of. We call this Excellence Assured.

Attain RTC is extremely pleased to confirm we have achieved UKAS Accreditation: Testing.

Achieving UKAS accreditation in a very short space of time is a significant milestone, thanks to the drive of the business, supported by a competent team versed in construction products testing, determined to deliver quality service to our customers. Test methods and standards covered by the scope will grow in the coming months. Contact the team to discuss your specific testing requirements.

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Currently Unaccredited

BS 8414-2

This large-scale system test that mimics a fire breaking out of a window on a high rise building and exposing an external cladding system to a severe fire.

It is solely intended to give an indication of fire spread across or within an external cladding system. The test duration of exposure to heat and flame is 30 minutes.

BS 8414-2 'Fire performance of external cladding systems - Test method for non-loadbearing external cladding systems fixed to, and supported by, a structural steel frame' does not test the individual component parts of a rainscreen cladding system in isolation (i.e. the fixings, fire breaks, cavities or insulation), but rather how the full build up behaves under fire conditions. Typically, we see this in new high rise builds with modern building materials.

Once the 60 minute test is completed and cooled, all components are inspected and reported.

Fire Resistance Testing

Attain RTC boasts a state-of-the-art fire resistance UKAS accredited testing laboratory to analyse the performance of construction products and materials.

Our 3m wide x 4m high aperture vertical furnace and 4m x 3m horizontal furnace have been designed and engineered to provide consistent and reliable results, on non-loadbearing construction products and systems including doors, windows, partitions, facade cladding, glazing, ceiling, flooring and roofing.

Vertical Furnace

The 3m wide x 4m high aperture vertical furnace can cater for specimen/samples up to 3m wide x 4m high, from access doors, to cladding systems.

We can also cater for smaller apertures for indicative type testing, with 3m wide x 3m high and 1.5m x 1.5m apertures.

Testing to a wide range of British and European standards for determining the fire resistance of non-loadbearing elements of building construction when subjected to the heat curve and pressure conditions specified in the relevant standard including, but limited to;

- **BS 476-22:1987** – Non-loadbearing Elements: Clause 5 (Walls), Clause 6 (Fully Insulated Doors), Clause 7 (Partially Insulated Doors), Clause 8 (Uninsulated Doors)
- **BS EN 1364-1:2015** – Non-loadbearing Elements: Walls
- **BS EN 1366-4:2021** – Service Installations: Linear Joint Seals
- **BS EN 1634-1:2014 +A1:2018** – Fire & Smoke Control: Doors, Windows
- **BS EN 1634-2:2008** – Fire & Smoke Control: Hardware

Horizontal Furnace

The horizontal furnace can cater for specimen/samples up to 4m x 3m, from floorings to ceilings and roofing systems. We can also cater for smaller apertures for indicative type testing, with 1.2m x 1.2m apertures.

Testing to British and European standards for fire resistance of non-loadbearing elements of building construction when subjected to the heat curve and pressure conditions specified in the relevant standard, including, but limited to;

- **BS 476-22:1987** – Non-loadbearing Elements: Clause 9 (Ceilings)
- **BS EN 1364-2:2018** – Non-loadbearing Elements: Ceilings

Smoke Tightness

The advanced smoke tightness test equipment is purpose-built to evaluate how effectively doors, shutters, and other non-loadbearing construction elements can prevent smoke passage under controlled pressure and temperature settings. This testing is critical to ensuring that these components restrict smoke movement in the event of a fire, helping to confine smoke and gases to designated areas to protect both life and property.

Our smoke tightness sample frames cater for samples up to 3.2m wide x 3.2m high, accommodating apertures large enough for double leaf doorsets enabling comprehensive assessments with ambient and elevated temperatures across a range of building applications.

- **BS EN 1634-3:2004** – Smoke Control Test for Door and Shutter Assemblies



BS EN 13501-1 Suite

SBI (Single Burning Item)

A method of testing that is used to determine the reaction to fire behaviour when a construction product is subject to thermal attack by a single heat source; BS EN 13823:2020 Reaction to fire tests for building products. Building products excluding floorings exposed to the thermal attack by a single burning item.

The test is relevant for Euroclass' A1, A2, B, C and D in accordance with BS EN 13501-1. The product being tested is mounted on a trolley and positioned in a frame beneath an exhaust system. As the item is exposed to flame, the exhaust system collects combustion gases for analysis and the amount of smoke produced is measured. The flame propagation and occurrence of burning particles and droplets are also identified in the specimen's burning behaviour.



Bomb Calorimeter

BS EN ISO 1716:2018 Reaction to fire tests for products – Determination of gross heat of combustion (calorific value) is the test method used for the determination of the gross heat of combustion of products at a constant volume in a bomb calorimeter.

Determination of the heat of combustion of a material (substantial and non-substantial components of a product) is required in accordance with BS EN 13501-1 Euroclass' A1 and A2, and floorings to classes A1_{fl} and A2_{fl}. In this test, a test specimen of specified mass is combusted completely under standardised conditions, at constant volume, in an oxygen atmosphere, in a high-pressure calorimetric bomb. The calorific value determined under these conditions is calculated on the basis of the observed temperature rise, taking account of heat losses and the latent heat of vaporisation of water. This test determines an absolute combustion value of the product. Dependent upon test results, a minimum 3 parallel tests are performed.

Ignitability Needle Flame

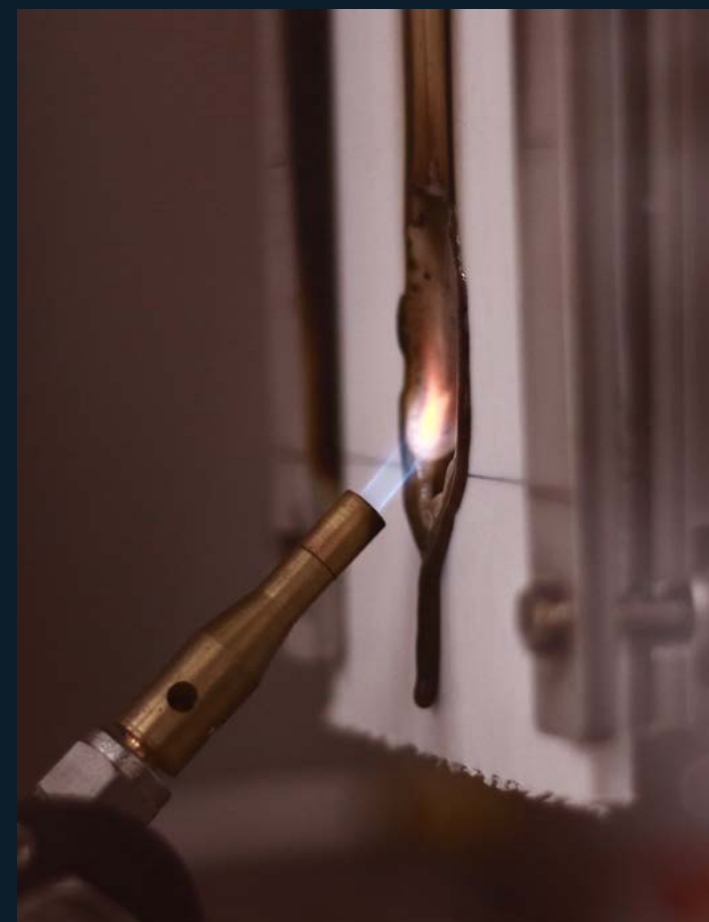
Performance of construction products and materials in accordance with BS EN ISO 11925-2.

Measures the ignitability of a sample when subjected to direct impingement of flame. It is relevant to material classes B, C, D and E in accordance with BS EN 13501-1.

Non-combustibility

Performance of construction products and materials in accordance with BS EN ISO 1182, evaluates the non-combustible properties of construction materials.

The test is included in the BS EN 13501-1 fire classification standard for classifications A1, A2 (construction products, excluding flooring), A1_{fl}, A2_{fl} (flooring products), A1_L and A2_L (linear pipe thermal insulation products). During the test, the specimen is placed in a furnace and possible burning events are monitored along with any temperature variation.



Radiant Roof (T4)

Radiant roof test equipment is used to determine the performance of roof products and systems to external fire exposure.

- **DD CEN/TS 1187:2012 (Test 4)** – Test methods for External Fire Exposure to Roofs
- **BS EN 13501-5** – Classification report standard using test data from 1187

This includes staged test methods incorporating burning brands, wind and supplementary radiant heat. The testing procedures determine the ability of a roofing product and/or system to resist fire and to examine how it would react to a nearby fire.

In particular, tests consider the transference potential from outside the building itself, and the likelihood of a fire penetrating the roof and spreading across its surface.

Thermal Calculations

In addition to above test methods for facades, windows and doors, we also provide accredited thermal performance calculations to a number of standards;

- **BS EN ISO 10077-1: 2017** Windows, Doors and Shutters
- **BS EN ISO 10077-2: 2017** Frames
- **BS EN ISO 12631:2017** Curtain Walling

Acoustics Testing Laboratory

Attain RTC is proud to present its cutting-edge UKAS accredited testing laboratory for acoustics, installed and commissioned for the measurement of airborne sound, impact sound insulation of building products, flanking transmission of ceilings, floors and walls. Our sound insulation testing includes roofing elements for rain noise levels.

Airborne Sound

Commonly known as weighted sound reduction (R_w) construction products or systems can be tested for sound transmission from one side to the other. Our highly engineered facility has enhanced flanking reduction for more accurate results in accordance with;

- **BS EN ISO 10140-1:2021** Application rules for specific products
 - **Annex A** Walls
 - **Annex B** Doors
 - **Annex C** Windows
 - **Annex D** Glazing
 - **Annex E** Small Technical Elements*
 - **Annex F** Floors (For both Airborne and Impact Sound Insulation Tests)
 - **Annex G** Acoustic Linings*
 - **Annex H** Floor Coverings*
 - **Annex I** Shutters
 - **Annex J** Linear Joints (Fillers or Seals)*

*Indicative tests

- **BS EN ISO 10140-2:2021** Measurement of Airborne Sound Insulation

Impact Sound

Laboratory methods for measuring the impact sound insulation of floor assemblies.

- **BS EN ISO 10140-3:2021** Measurement of Impact Sound Insulation

Currently Unaccredited

Rain Noise

Laboratory method of measurement of the impact sound insulation of roofs, roof/ceilings systems, roof windows/skylights and rooflights excited by artificial rainfall.

- **BS EN ISO 140-18:2006** Laboratory measurement of sound generated by rainfall on building elements
- **BS EN ISO 10140-1:2021** Application rules for specific products
 - **Annex K** Roofs, Roof/Ceiling Systems, Roof Windows/Skylights and Rooflights (Rainfall Sound)





CWCT

CWCT (Centre for Window and Cladding Technology) is synonymous with facade testing in the UK.

Primarily, most testing is conducted using Sequence B, which incorporates air permeability, weather penetration, wind resistance and impact resistance. Attain RTC can offer CWCT, alongside European or American test standards.

Impact Resistance:

- **CWCT Clause 15** Hard and Soft Body
- **BS EN 949: 1999** Soft and Heavy Body Impact
- **BS EN 950: 1999** Doors - Hard Body Impact
- **BS EN 14019: 2004** Curtain Walling
- **BS EN 1991-1-1: 2002 – Eurocode 1:** Imposed Loads for Buildings

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Air Permeability:

- **CWCT Section 5 Building Envelopes** (equivalent to BS EN 12153)
- **BS EN 12153:2006** Curtain Walling
- **ASTM E283:2019** Exterior Windows, Skylights, Curtain Walls, and Doors

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Water Penetration Tests Under Static Pressure Conditions:

- **CWCT Section 6 Building Envelopes** (equivalent to BS EN 12155)
- **BS EN 12155: 2000** Curtain Walling
- **ASTM E 331: 2016** Windows, Skylights, Doors, and Curtain Walls

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Water Penetration Tests Under Dynamic Pressure Conditions:

- **CWCT Section 7 Building Envelopes** (with aero engine)
- **CWCT Section 8 Building Envelopes** (equivalent to BS EN 13050)
- **BS EN 13050: 2011** Curtain Walling
- **AAMA 501.1: 2017** Windows, Curtain Walls and Doors

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Wind Resistance Tests:

- **CWCT Section 11 & 12 Building Envelopes** (when combined exceed the requirements of BS EN 12179)
- **BS EN 12179: 2000** Curtain Walling
- **ASTM E 330: 2021** Exterior Windows, Doors, Skylights and Curtain Walls

Facades, Windows and Doors

A mix of large scale façade testing for all types of construction products.

Used in a variety of sectors including but not limited to curtain walling, glazing, rainscreen, cladding, incorporating interfaces such as floors, windows and doors.

Cyclic Testing

Multi-purpose equipment allows for installation of curtain walling, window and/or door systems up to 3m wide x 2.5m high.

Cyclic or static, dynamic and fatigue load tests can be conducted in accordance with a number of harmonised European standards, including;

- **BS EN 12046-1 & 12046-2:** Operating Forces for Windows and Doors
- **BS EN 14608:** Windows - Determination of Resistance to Racking on Windows
- **BS EN 14609:** Windows - Determination of the Resistance to Static Torsion
- **BS EN 947:** Hinged or Pivoted Doors - Determination of the Resistance to Vertical Load
- **BS EN 948:** Hinged or Pivoted Doors - Determination of the Resistance to Static Torsion

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- **BS EN 1191:** Resistance to Repeated Opening and Closing
- **BS EN 13126-8 & 13126-9:** Building Hardware tests on Windows and Doors



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PAS 24

This test standard determines the security performance of doors and windows, by a pass fail criterion in accordance with;

- **PAS 24:2022** Enhanced security performance requirements for doorsets and windows in the UK. Doorsets and windows intended to offer a level of security suitable for dwellings and other buildings exposed to comparable risk

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Burglar / Security

Burglar resistance tests are performed on windows, doors, curtain walling, grilles and shutters in accordance with;

- **BS EN 1628:** Test method for the determination of resistance under static loading
- **BS EN 1629:** Test method for the determination of resistance under dynamic loading
- **BS EN 1630:** Test method for the determination of resistance to manual burglary attempts



Applus Laboratories & Attain RTC

Integrated Fire Door Testing & Certification Solution

Overview

Applus Laboratories and Attain RTC have established a strategic collaboration to deliver a fully integrated, end-to-end solution for fire door testing and certification.

This collaboration combines Attain RTC's advanced fire testing capabilities in the United Kingdom with Applus Laboratories' internationally recognised testing, certification, assessment, and compliance expertise to help manufacturers accelerate time to market while ensuring confidence in product compliance.

Partnership Structure

ATTAIN RTC

Attain RTC (United Kingdom)
Testing Partner

- Conducting Fire resistance testing in accordance with EN 1634-1 for all type of doors in 3m wide x 4m high, 3m wide x 3m high and 1.5m x 1.5m furnaces and issuance of test reports
- **UKAS accredited laboratory**, based in the United Kingdom



Applus⁺ laboratories

Applus Laboratories (Spain)
Assessment & Certification Partner

- Sampling coordination and technical review
- Witnessing fire resistance testing at Attain facilities
- Issuance of classification reports for CE marking including Direct Application (DIAP) assessments in accordance with **EN 13501-2**
- Preparation of Extended Application (EXAP) reports in accordance with the EN 15269 series, enabling wider product configuration coverage beyond direct test results
- Factory Production Control (FPC) inspections and certification issuance, including:
 - CE marking under **EN 16034** for external fire doors
 - Applus Fire Safety Certification for internal fire doors



Operational Framework

The collaboration follows a structured and transparent workflow:

Inquiry

Customer Inquiry via Attain / Applus+

Technical product matrix shared to obtain basic information

Quotation

Test & EXAP quotation preparation depends on the product structure (with or without EXAP)

Three party quotation
(Customer – Attain – Applus)

Sampling

Sampling is **arranged prior to the fire test**

Sampling is performed at the **manufacturing facility**

The **type of sampling** (remote or on-site) is defined by **Applus+**, in accordance with the project requirements

Fire Resistance & Test Reporting

All fire tests are conducted at Attain laboratories under the following conditions:

- **Without EXAP** Windows, Curtain Walls and Doors

- Applus+ issues the Classification Report and DIAP
- No Applus+ witness is required during testing

- **With EXAP**

- Applus+ issues the EXAP, DIAP, and Classification Report
- An Applus+ witness is mandatory for at least one fire test

Certification

Factory Production Control Inspection to be performed by Applus at manufacturing site

If the inspection implemented successfully, issuance of certificate will be done by Applus

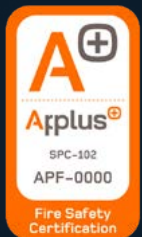


Product Certification
& Market Access



CE Marking

Applus+ Laboratories is a notified body (n° 0370) for the Construction Products Regulation. We provide CE marking services for a wide range of fire safety products.



Applus+ Fire Safety Mark

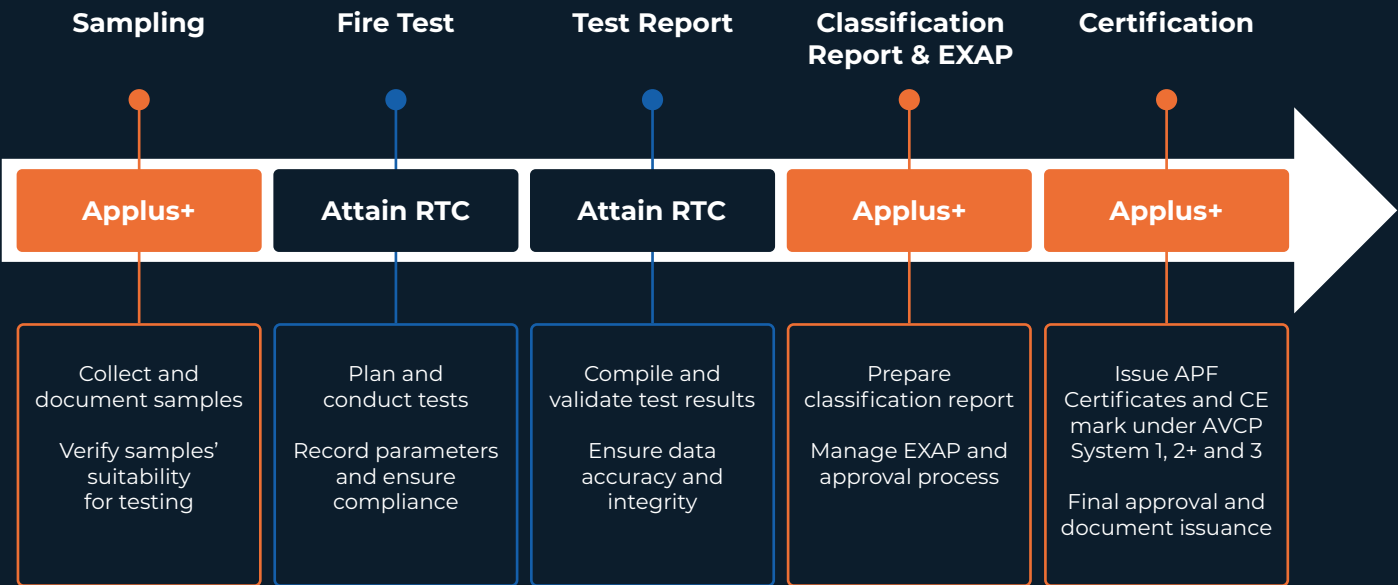
The Applus+ Fire Safety mark is a private and voluntary certification that helps manufacturers to differentiate their products and demonstrate their quality in markets where testing and certification are not mandatory. Our mark is recognised by the Gulf Council Countries, granting market access in this region.

Value Proposition

This integrated model delivers clear and measurable advantages for manufacturers:

- A **single-interface solution** covering testing, assessment, and certification
- **Optimised project timelines** through fully coordinated execution between partners
- **Reduced administrative and technical complexity** across the entire certification process
- **High level of technical assurance** with full alignment to applicable regulatory frameworks
- **Enhanced market access** across both UK and European markets

Operational Workflow





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