



INTRODUCTION

Building Testing Limited (BTL) provides an independent, professional, cost-effective and expedient consultancy, inspection and testing service to the building, construction and consumer product industries.

Based at their offices and laboratory in Woking, Surrey BTL offer a comprehensive range of facilities for on site and laboratory based assignments for:-

- Building Industry Professionals
- Developers, Owners and Occupiers
- Contractors and Subcontractors
- Manufacturers
- Certifiers
- Users
- Trading Standards

Company policy

Company Policy To carry out all assignments in a professional, timely manner, to a high degree of accuracy and quality, and in reflection of client requirements.

To generate assignment reports that provide an independent, authoritative and traceable record of evidence.

The team

The Team

A team of dedicated engineers, technologists and technicians aim to provide an enhanced level of service through responsive, qualified and strict attention to detail.

The company was founded by Paul Nice after an extensive and diverse career at home and abroad including 17 years as manager of the Test Development & Building Investigation Department at Yarsley.

His comprehensive knowledge of the installation, performance and evaluation of building products and his standing as a recognised expert in the field of raised access flooring has established BTL as a laboratory with a highly regarded reputation.

Ian Collins

With a sound base in laboratory practise and having

formerly been a founding director of an independent laboratory, he brings a wide-ranging experience in all aspects of standard and customised testing procedures and the provision of dedicated attention to the client needs.

He is exceptionally skilled in laboratory procedures and site testing, and is responsible for BTL technician training programmes, maintenance of the BTL quality systems and third-party accreditation.

Accreditation

Accreditation Quality Assured and Registered Firm in accordance with BS EN ISO 9001 : 2000 for the Provision of Testing, Inspection and Consultancy Services.

Further third party accreditation is pending Member of the British Standards Institute, Building Services Research and Information Association, and Institute of Leisure and Amenity Management

Facilities

Facilities The company operates from offices and quality accredited laboratories at Woking, Surrey to service all disciplines within the building, construction and consumer products industry.

Dedicated laboratory test facilities are provided for access floors, barriers, construction and consumer products.

Dedicated site testing equipment is provided for evaluation of access floors, air tightness of plenums and compartments, load bearing capacity, thermal properties, water tightness of facades.

Customised test equipment and evaluation programmes are established as required. Staff are qualified and trained in laboratory and testing practices.

A technical inspection and consultancy service is provided.



SERVICES

Access floors

Technical consultancy; specification validation, laboratory testing; site testing, defect analysis. Paul Nice was a consultant to the PSA.MOB during development and implementation of the universally recognised PSA specification.

Air leakage

Building compartments, raised access plenum floors, doors & windows.

Automotive products

Body parts, bumpers, lifts & jacks.

Barriers

Pedestrian & vehicle barriers; arenas, balconies, balustrades, car parks; parapets, stadiums.

Consumer products

Specific, comparative and benchmark testing, customised evaluation programmes, defect analysis. Conformance with General Product Safety Regulations

Environmental

Energy conservation; air tightness, compartment pressure testing, thermal imaging, sick building syndrome.

Expert witness

Technical expert advice relating to access floors, building services, facades, roofing

Facades

Cladding, doors & windows, stone and aluminium facades for air leakage, water penetration, thermal properties and impact

Fixtures & fittings

Anchors, doors, gates, partitions, plumbing, shelving, .

Furniture

Garden, household & office furniture.

Glazing

Glass, stone and aluminium facades for air leakage, water penetration and impact

Health & safety

Method statements, risk assessments.

Load testing

In situ loading tests on anchors, balustrades, bridges, cladding, cradle rails, fixings, floors and lift beams,

Materials

Rainwater goods, floor covering, plumbing goods, paving,

On site testing

Condensation, damp penetration, defect analysis, water penetration.

Quality checks

Product appraisal, testing to specification, screen testing & type testing

Structural anchors

Routine testing of anchors, fixings, hooks

Swimming pools

Building & basin defects, building services, floor coverings, pool furniture, pool surrounds, risk assessments, suspended ceilings, tiling, ventilation, water penetration.

Tools & equipment

Hand & power tools, submersible pumps, extract fans

Trading Standards

Product testing, risk analysis, defect analysis, failure investigation. Conformance with General Product Safety Regulations

SERVICES CONTINUED...

Consultancy

Typified by the generation of assignment reports in support of:-

- Correlation of UK, EN, USA and industry-norm specifications
- Technical evaluation
- Tender analysis
- Product evaluation & development
- Quality management systems
- Operation and maintenance manuals
- Case investigations

In situ inspection & testing

Examples of standard and customised testing and evaluation regimes include:-

- Access floors; air tightness; load capacity
- Balustrades, barriers & parapets
- Condition surveys
- Cladding & glazing
- Energy conservation; environmental conditions, air & water tightness, thermal imaging
- Floors; floor coverings, paving
- Loading; floors, roofs, walls, fixtures & fittings
- Post-installation inspection
- Walls & partitions

Laboratory evaluation & testing

Product evaluation entails the application of physical and mechanical measurement techniques including:-

- Dimensions, density, thickness, weight
- Temperature & humidity
- Load capacity; static, dynamic, cyclic, rolling, safety factor, ultimate.
- Pressure & flow

Building & consumer products

A wide range of products is evaluated.

- Comparative, benchmark and performance testing
- Routine testing in accordance with National and International Standards, industry norms, in-house specifications
- Development of customised testing programmes
- Evaluation of products for operability, productivity and durability
- Evaluation of materials for specification compliance and fitness for purpose
- Production testing throughout the manufacturing, supply, installation and service life cycle.
- Complaints investigation comprising defect analysis in both the service environment and under laboratory conditions as appropriate.



CASE STUDIES

Project: Chiswick Park, London

Six prestigious office buildings in a water-park setting
www.enjoy-work.com

TASK:

Some fifty thousand square metres of raised access floors installed throughout the office areas were to function as air plenums.

In the interests of energy conservation and efficient utilisation of mechanical plant, the floor in all areas was required to be pressure tested and measured for air tightness.

REPORT:

Carried out during the fit-out phase, our enhanced on-site testing service and purpose-made test equipment enabled us to provide timely results to a high degree of accuracy.

By working closely with the Specialist Subcontractor, the stringent air tightness specification was achieved on all areas of the raised access floors and the associated physical boundaries forming the voids beneath.

Our succinct reports were then available for incorporation into the respective building O & M Manual.

The total area of similar recent tests we have carried out on a wide variety of projects in the UK now exceeds one hundred and ten thousand square metres.

Project: A prominent dwelling, London

Wrought iron gates damaged by traffic

TASK:

With apparent malicious intent, a driver crashed his car into one of the large, heavy and highly decorative gates of a London Palace.

In preparation for re-hanging of the gate, it was required that one of the substantial hinge brackets was mechanically load tested in situ to assess the security of its embedment in the supporting stone pier.

REPORT:

This unique situation required the design and fabrication

of a custom-built test rig that would impose, in turn, controlled lateral and axial loads to the bracket, which was some three metres above ground level.

During all phases of loading, any movement of the bracket relative to the pier was measured to an accuracy of one-hundredth of a millimetre.

The tests were completed within one day and we understand the gate was re-hung and continues in service.

Project: Laboratory testing, in-house

A full programme of tests on an access floor system

TASK:

In validation of the manufacturer's technical data sheets, laboratory tests were required according to MOB PF2 PS/SPU

This performance specification for platform floors was developed under the auspices of the PSA in the 1980's and remains the primary standard of measurement.

REPORT:

Our permanent test facility allows examination of a complete floor system constructed to replicate the in situ condition.

The specified test programme provides for a comprehensive product assessment within four distinct performance grades.

The considered parameters include dimensional, structural, hygrothermal, fire & safety, sound, coverings, and electrical.

Our report provided an independent, qualitative and authoritative appraisal of the floor system.

Project: A racecourse, Liverpool

Routine testing of crowd-control barriers

TASK:

In the interests of public health & safety, a certain proportion of the crowd control barriers are required to

CASE STUDIES CONTINUED...

be tested on a regular basis.

This entails in situ load testing, measurements of deflection and recovery in accordance with the guide for safety in sports grounds.

REPORT:

Using our versatile mobile test rigs a series of uniformly distributed loads were applied to the barriers in the required locations.

The degree of imposed load is governed by the respective type of barrier within and around the seating or standing areas, and to the stairs or gangways serving them.

Similar in situ tests are carried out in show grounds and arenas throughout the UK, And, at a higher degree of loading, to vehicular barriers around buildings and car parks.

Laboratory tests are carried out on a wide variety of prototype barrier designs.

Project: Consumer products

Submersible pumps - comparative performance testing.

TASK:

Various submersible pumps are under consideration for inclusion in a distributor's catalogue.

In order to select the most suitable product, a programme of comparative testing has to be devised to assess relevant performance capabilities.

REPORT:

The test regime considered:-

- Operability, instructions, installation, ease of use
- Productivity, flow, flow against pressure head
- Durability, long term operation

Other product assessment has included:-

- Automotive products
- Furniture
- Garden Tools
- Hand tools
- Kitchen and bathroom fixtures & fittings
- Ladders
- Power tools
- Re-constituted stone paving.

CONTACT

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