



Supporting the construction industry
throughout the **RIBA Plan of Work**

www.stroma.com

A co-ordinated approach to building sustainability and compliance



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Thank you for your interest in The Stroma Group

Stroma was formed in 2002 and has become the market leader in building energy performance, sustainability and compliance. The core of our business delivers services into the construction, infrastructure and energy industries with individual divisions spanning building control, building compliance and certification. In addition, our software division serves both the core Stroma market as well as well as pursuing wider business opportunities. Construction is an ever-changing industry and Stroma possesses the service catalogue, expertise and commitment to innovation that means we can represent and work with the industry to meet these challenges.



Martin Holt
Chief Executive Officer



Strategic Definition

“The Strategic Brief may require a review of a number of sites or alternative options, such as extensions, refurbishment or new build. By asking the right questions, the consultants, in collaboration with the client, can properly define the scope for a project, and the preparation and briefing process can then begin.” **(RIBA Plan of Work 2013)**

Stroma’s holistic project approach commences at the inception of your development. Our Pre-Construction Services allow you to assess project risk before the design stage. We can work with Developers, Clients and Architects to assess proposed development sites and advise about potential environmental and ecological impacts which may inform the design.



Featured Services:

- Acoustic Consultancy
- Client CDM Advisor
- Contaminated Land Assessments
- Ecology Assessments



Thank you for all your help with our project. The help and service your team provided in allowing us to achieve full planning approval for the project was of great help and very much appreciated. I look forward to using Stroma again on our next development.



DID YOU KNOW?

Advice from Natural England includes guidance on many different types of protected species including bats, great crested newts, badgers, dormice, water voles, otters, wild birds, reptiles, protected plants, invertebrates, freshwater fish and ancient woodland. Developers should seek advice on wildlife guidance when planning for construction activity.



Preparation and Brief

“Several significant and parallel activities need to be carried out during Stage 1 Preparation and Brief to ensure that Stage 2 Concept Design is as productive as possible. These split broadly into two categories:

- developing the Initial Project Brief and any related Feasibility Studies
- assembling the project team and defining each party’s roles and responsibilities and the Information Exchanges.”

(RIBA Plan of Work 2013)

By ensuring compliance in the pre-construction phase you can achieve cost savings and energy efficiency targets further in the lifecycle. Our building compliance experts offer a variety of calculation and assessment services to meet legal obligations, planning policy or environmental regulations.



Featured Services:

- Air Quality Assessments
- BREEAM
- Daylight & Sunlight Assessments
- Energy Statements
- SAP, SBEM & DSM Calculations

“ Thank you for completing the Daylight Assessments, Energy Reports and SAPs for our 5 sites. Throughout the process of providing us with a report for our planning application, I have found working with yourself and Stroma to be an extremely professional and pleasant experience. ”



DID YOU KNOW?

There are almost 800 separate Air Quality Management issues attributed to Local Authorities across the UK (source: DEFRA). Almost two thirds of major UK conurbations are now classified as some form of Air Quality Management Area (AQMA).



Concept Design, Developed Design, Technical Design

“The initial Concept Design is produced in line with the requirements of the Initial Project Brief. The project team also develops in parallel with the Concept Design, a number of Project Strategies.”

“By the end of stage 3, the architectural, building services and structural engineering design will all have been developed, and will have been checked by the lead designer.”

“At stage 4, the architectural, building services and structural engineering designs are now further refined to provide technical definition of the project and the design work of specialist subcontractors is developed and concluded.”
(RIBA Plan of Work 2013)

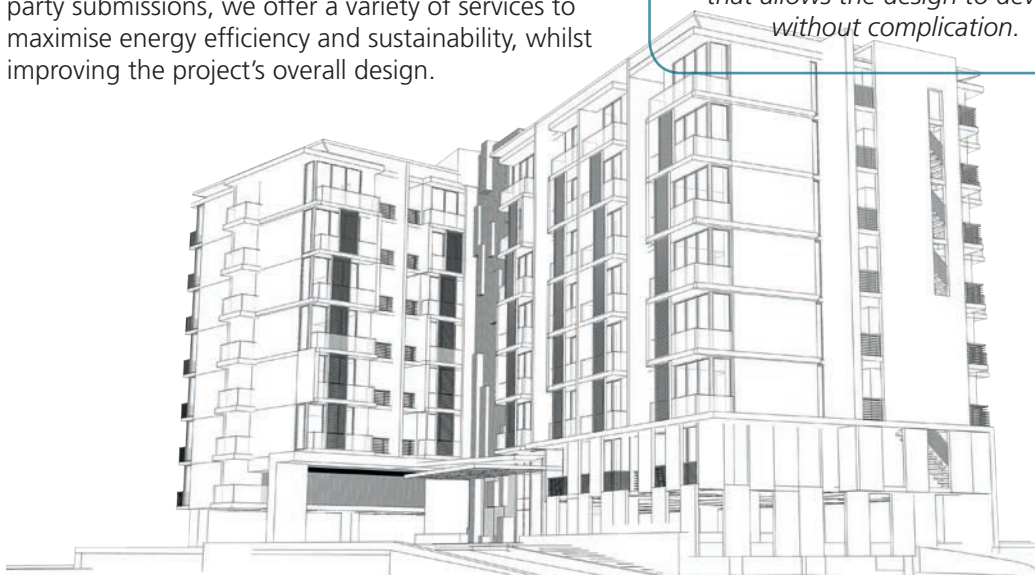
Our diverse and experienced teams across the group unite in providing invaluable support with the initial scheme stages of a project, offering consultative advice to its design intent and strategies, right through to its completed technical design. Whether it's to support a planning application or to provide assistance with Building Regulations and other third party submissions, we offer a variety of services to maximise energy efficiency and sustainability, whilst improving the project's overall design.



Featured Services:

- Air Tightness Consultancy
- Building Control (First Principals, Developed Design Details, Initial Notice)
- Indoor Air Quality
- Life Cycle Costing
- Noise, Vibration & Dust Monitoring
- Principal Designer CDM Advisor
- Thermal Bridging Calculations

“We find the service and working relationship with Stroma to be one of the most helpful and pragmatic encountered. Their approach commences with an in-principle opinion at the sketch/concept stage that allows the design to develop without complication.”



DID YOU KNOW?

Over 12,000 new Initial Notices were issued to our independent Approved Inspector businesses in 2016/17.



Construction

“During this stage, the building is constructed on site and in accordance with the Construction Programme. Construction includes the erection of components that have been fabricated off site.

The procurement strategy and/or the designer’s specific Schedule of Services will have set out the designer’s duties to respond to Design Queries from site generated in relation to the design, to carry out site inspections and to produce quality reports.” **(RIBA Plan of Work 2013)**

By carrying out regular site inspections and preliminary testing, Stroma can assist with reviewing a project’s progress against its building contract. Our consultancy services can advise on design queries and propose cost-effective remedial measures to minimise potential impacts to the construction programme and ensure compliance with obligatory targets.



Featured Services:

- **Acoustic Testing**
- **Air Tightness Testing**
- **Building Control (Site Inspections)**
- **Contractor CDM Advisor**






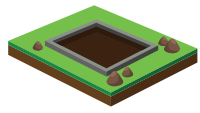









DID YOU KNOW?

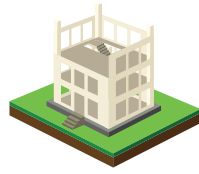
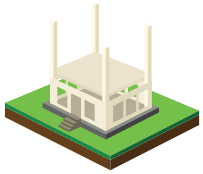
Over 21,000 Air Tightness Tests were conducted by our building compliance companies in 2016/17.

“ Stroma has provided air leakage testing and consultancy services to Carillion on in the region of 30 varied projects, located across the UK.

On all of the projects, I have been extremely satisfied with the quality of service we have received. The professionalism and integrity displayed in their undertakings has been exemplary and they have shown a thorough working knowledge of the Building Regulations. ”

Stroma Group: RIBA Plan of Work

					
Stages ▼					
Tasks ▼		Strategic Definition	Preparation and Brief	Concept Design	Developed Design
 Approved Inspectors				<ul style="list-style-type: none"> ✓ First principals agreed with Building Control for: <ul style="list-style-type: none"> • Fire Strategy • Part L • Access and Use 	<ul style="list-style-type: none"> ✓ Developed design details issued to Building Control ✓ Initial reports issued covering compliance and value engineering
  		<ul style="list-style-type: none"> ✓ Acoustic Consultancy ✓ BREEAM/CSH ✓ Client CDM Advisor ✓ Contaminated Land Assessments ✓ Ecology Assessments 	<ul style="list-style-type: none"> ✓ Acoustic Consultancy ✓ Air Quality Assessments ✓ BREEAM/CSH ✓ Client CDM Advisor ✓ Contaminated Land Assessments ✓ Daylight & Sunlight Assesments ✓ Ecology Assessments ✓ Energy Statements ✓ Life Cycle Costing ✓ Noise, Vibration & Dust Monitoring ✓ SAP/SBEM/DSM ✓ Site Investigation 	<ul style="list-style-type: none"> ✓ Acoustic Consultancy ✓ BREEAM/CSH ✓ Client CDM Advisor ✓ Contaminated Land Assessments ✓ Daylight & Sunlight Assesments ✓ Ecology Assessments ✓ Flood Risk Assessments ✓ Heat Loss Calculations ✓ Life Cycle Costing ✓ Noise, Vibration & Dust Monitoring ✓ Overheating Risk Analysis ✓ Principal Designer CDM Advisor ✓ SAP/SBEM/DSM ✓ Site Investigation ✓ Thermal Bridge Calculations ✓ Water Efficiency Calculations 	<ul style="list-style-type: none"> ✓ Acoustic Consultancy ✓ Air Quality Assessments ✓ Air Tightness Consultancy ✓ BREEAM/CSH ✓ Client CDM Advisor ✓ Contaminated Land Assessments ✓ Daylight & Sunlight Assesments ✓ Ecology Assessments ✓ Flood Risk Assessments ✓ Heat Loss Calculations ✓ Life Cycle Costing ✓ Noise, Vibration & Dust Monitoring ✓ Overheating Risk Analysis ✓ Principal Designer CDM Advisor ✓ SAP/SBEM/DSM ✓ Site Investigation ✓ Water Efficiency Calculations
		<ul style="list-style-type: none"> ✓ Organisation Information Requirements (OIR) 	<ul style="list-style-type: none"> ✓ Asset Information Requirements (AIR) ✓ Employer's Information Requirements (EIR) ✓ Project Information Model (PIM) 	<ul style="list-style-type: none"> ✓ Asset Information Requirements (AIR) ✓ BIM Certification (PAS 1192-5 - Security) ✓ BIM Execution Plan (BEP) ✓ Employer's Information Requirements (EIR) ✓ Master Information Delivery Plan (MIDP) ✓ Project Information Model (PIM) 	<ul style="list-style-type: none"> ✓ BIM Certification (PAS 1192-5 - Security) ✓ BIM Execution Plan (BEP) ✓ Master Information Delivery Plan (MIDP) ✓ Project Information Model (PIM) ✓ Supply Chain Assessments ✓ Task Information Delivery Plan (TIDP)



Technical Design



Construction

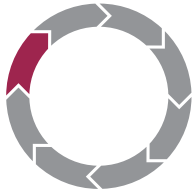


Handover and Close Out



In Use

<ul style="list-style-type: none"> ✓ Detailed reports issued Formal consultations with Statutory Authorities ✓ Initial Notice Submitted Part L Thermal Models issued to Building Control 	<ul style="list-style-type: none"> ✓ Regular site inspections of sub structure, super structure, drainage, M&E systems and FF&E items ✓ Status Reports following continuous review of design information 	<ul style="list-style-type: none"> ✓ Witnessing of commissioning & testing ✓ As built design information provided ✓ As built thermal model issued to Building Control ✓ Final certificate issued 	
<ul style="list-style-type: none"> ✓ Acoustic Consultancy ✓ Air Quality Assessments ✓ Air Tightness Consultancy ✓ BREEAM/CSH ✓ Client CDM Advisor ✓ Daylight & Sunlight Assessments ✓ Ecology Assessments ✓ Energy Statements ✓ Flood Risk Assessments ✓ Heat Loss Calculations ✓ Indoor Air Quality ✓ Noise, Vibration & Dust Monitoring ✓ Principal Designer CDM Advisor ✓ SAP/SBEM/DSM ✓ Thermal Bridge Calculations ✓ Thermal Comfort Analysis ✓ Water Efficiency Calculations 	<ul style="list-style-type: none"> ✓ Acoustic Testing ✓ Air Quality Assessments ✓ Air Tightness Consultancy ✓ Air Tightness Testing ✓ BREEAM/CSH ✓ Client CDM Advisor ✓ Contractor CDM Advisor ✓ Energy Statements ✓ Noise, Vibration & Dust Monitoring ✓ Plenum Testing ✓ Room Integrity Testing ✓ SAP/SBEM/DSM ✓ Water Efficiency Calculations 	<ul style="list-style-type: none"> ✓ Acoustic Stopping ✓ Acoustic Testing ✓ Air Quality Assessments ✓ Air Tightness Testing ✓ BREEAM/CSH ✓ Client CDM Advisor ✓ Contractor CDM Advisor ✓ DEC/EPC ✓ Noise, Vibration & Dust Monitoring ✓ Remedial Air Sealing ✓ Room Integrity Testing ✓ SAP/SBEM/DSM ✓ Temporary Air Sealing ✓ Thermal Comfort Analysis ✓ Thermography 	<ul style="list-style-type: none"> ✓ Acoustic Stopping ✓ Air Quality Assessments ✓ BREEAM/CSH ✓ Building Clean ✓ Building Inspection & Maintenance ✓ Electrical Thermography ✓ Energy Audits/ESOS ✓ Fire Stopping ✓ Heat Load Testing ✓ Minimum Energy Efficiency Standards ✓ Remedial Air Sealing ✓ Thermography
<ul style="list-style-type: none"> ✓ BIM Certification (PAS 1192-5 - Security) ✓ BIM Certification (PAS 1192-6 - Health & Safety) ✓ BIM Execution Plan (BEP) ✓ Master Information Delivery Plan (MIDP) ✓ Project Information Model (PIM) ✓ Supply Chain Assessments ✓ Task Information Delivery Plan (TIDP) 	<ul style="list-style-type: none"> ✓ BIM Certification (PAS 1192-2 - CAPEX phase) ✓ BIM Certification (PAS 1192-5 - Security) ✓ BIM Certification (PAS 1192-6 - Health & Safety) ✓ BIM Execution Plan (BEP) ✓ Master Information Delivery Plan (MIDP) ✓ Project Information Model (PIM) ✓ Supply Chain Assessments ✓ Task Information Delivery Plan (TIDP) 	<ul style="list-style-type: none"> ✓ BIM Certification (PAS 1192-5 - Security) ✓ BIM Certification (PAS 1192-6 - Health & Safety) ✓ BIM Execution Plan (BEP) ✓ Master Information Delivery Plan (MIDP) ✓ Project Information Model (PIM) ✓ Task Information Delivery Plan (TIDP) 	<ul style="list-style-type: none"> ✓ Asset Information Model (AIM) ✓ Asset Management System ✓ BIM Certification (PAS 1192-5 - Security) ✓ BIM Certification (PAS 1192-6 - Health & Safety) ✓ BIM Certification (PAS 1192-3 - OPEX phase)



Handover and Close Out

“The project team’s priorities during this stage will be facilitating the successful handover of the building in line with the Project Programme and, in the period immediately following, concluding all aspects of the Building Contract, including the inspection of defects as they are rectified of the production of certification required by the Building Contract.” **(RIBA Plan of Work 2013)**

As a market leader in building compliance, we deliver a range of final assessment and consultative services required for a building’s handover. Whether it’s to meet planning or legal requirements, environmental standards or funding budgets, our compliance experts have the necessary expertise to assist with final certification, in accordance with the building contract.



Featured Services:

- Acoustic Stopping
- Building Control (Final Certificate)
- DEC/EPC Lodgement & Certification
- Remedial Air Sealing
- Thermal Comfort
- Thermography

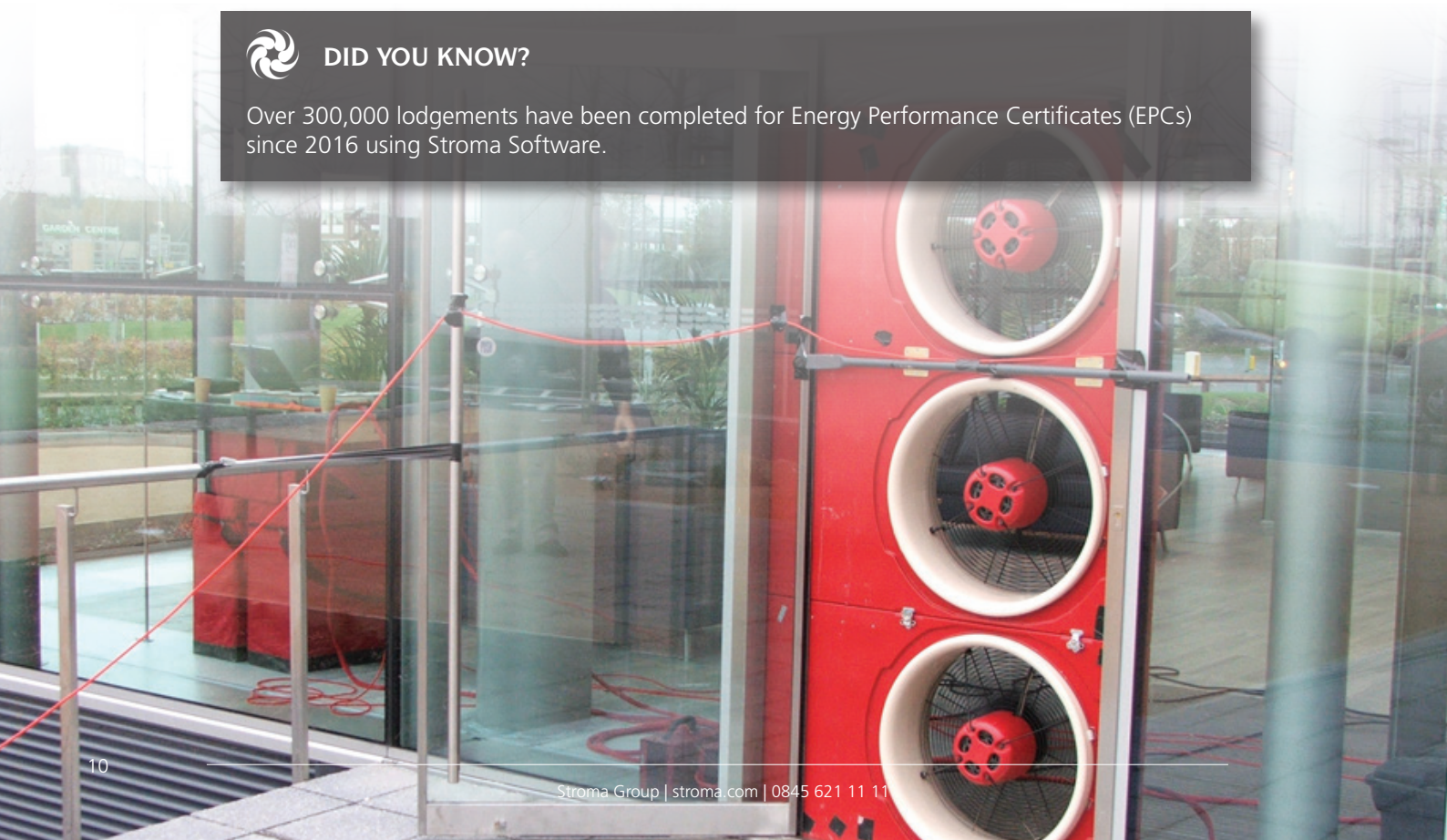


HRS has provided an ongoing professional, efficient and comprehensive abseiling, testing and reporting service for over 10 years on behalf of Manchester City Council. They have proven to very cost effective in direct competition, whilst still maintaining the level of service required by the client.



DID YOU KNOW?

Over 300,000 lodgements have been completed for Energy Performance Certificates (EPCs) since 2016 using Stroma Software.





In Use

“Stage 7 is a new stage which includes Post-occupancy Evaluation and review of Project Performance as well as new duties that can be undertaken during the In Use period of a building.”
(RIBA Plan of Work 2013)

Our capability and expertise doesn't end with the practical completion of a project as we offer continual and long term monitoring until the end of a building's life. We are an acknowledged expert on building performance monitoring, identifying energy saving opportunities for buildings already in use.

We also offer a range of health and safety risk assessments and surveys to identify and reduce risks in existing buildings, in compliance with legislative requirements.



DID YOU KNOW?

More than 2,000 inspection reports were completed in 2017 using our Automated Visual Reporting (AVR) Software which allows inspection data to be collected on a mobile device.



Featured Services:

- **Building Inspection & Maintenance**
- **Electrical Thermography**
- **ESOS Assessments**
- **Health and Safety Risk Assessments**
- **Minimum Energy Efficiency Standards (MEES)**



Health and safety is very much a priority for our firm. Stroma's collaborative approach in coordinating our assessments really appealed to us, and working in partnership with our facilities and property management team, together we will ensure our managed property portfolio meets with current legislation and compliance.





Approved Inspectors

The Stroma Group includes three independent CIC Approved Inspectors (Approved Design Consultancy, BBS Building Control and Greendoor Building Control). Each business provides a comprehensive Building Control service to clients on a nationwide basis for a range of project types. Approved Design, BBS and Greendoor each assess compliance against the requirements of the Building Regulations. The services of each business are provided as a cost effective and highly specialist alternative to Local Authority Building Control (LABC).



- Commercial
- Defence
- Education
- High Rise
- Industrial

- Leisure
- Mixed Use
- Office
- Residential
- Retail

Qualified Building Control Surveyors

Approved Design, BBS and Greendoor provide qualified Building Control Surveyors via a network of regional offices. This means you can rely on quality, professional advice and support from a surveyor local to your project. By engaging with an Approved Inspector at the project outset you can check compliance against the Building Regulations at a very early stage.



Contact Approved Design, BBS or Greendoor

approveddesign.co.uk | bbsbuildingcontrol.co.uk | green-door.com



Building Compliance and Sustainability

Our Building Compliance and Sustainability division includes expert consultancy teams from Stroma Tech, HRS Services and BBS Environmental. Together, they provide accredited testing, assessment and dedicated consultancy services to facilitate the development refurbishment or management of energy-efficient and sustainable buildings. We support the built environment industry to mitigate risk, ensure compliance and reduce costs throughout the construction lifecycle.



Pre-Construction Stage Services

Services including: BREEAM, Life Cycle Costing, Energy Statements, Daylight & Sunlight Assessments, Noise, Vibration & Dust Monitoring, Air Quality Assessments, Ecology Services, Acoustic Consultancy and SAP/SBEM/DSM.

Construction Stage Services

Services including: Acoustic Testing, Air Tightness Testing, Indoor Air Quality Testing, Acoustic Stopping, Remedial Air Sealing and Temporary Air Sealing.

Post Construction Services

Services including: Minimum Energy Efficiency Standards (MEES), Energy Savings Opportunity Scheme (ESOS), Workplace Health & Safety Assessments, Thermography and Electrical Thermography.

Inspection & Maintenance Services

HRS Services also includes specialist Inspection & Maintenance teams for the ongoing inspection, maintenance and examination of buildings and infrastructure. Services include Rope Access, Maintenance Work, Building Surveys, Storm Damage Repair and Safety Removals.



Contact Stroma Tech, HRS Services & BBS Environmental

stromatech.com | hrsservices.co.uk | bbsenvironmental.co.uk



Certification and Digital Construction

Stroma Certification is the market leader in the provision of accredited certification and training services throughout the construction and energy sectors. By building competency throughout the industry, we empower our members to work compliantly and safely to maintain the highest standards. In addition, our Company Certification schemes offer the opportunity for businesses to make efficiency gains and encourage collaboration within the construction sector.



Services:

Digital Construction and BIM

Digital is having an increasingly resonant impact in the construction industry. The growth in technology permeates modern society and promises the opportunity for greater collaboration and efficiency savings by adapting traditional processes. Stroma has long been a pioneer of innovation and is at the leading edge of driving Digital Construction methods and the increased adoption of Building Information Modelling (BIM).

BIM Certification

Stroma Certification developed a BIM Certification scheme to help organisations and their supply chains to demonstrate compliance with the Government's BIM standards. Achieving BIM Certification demonstrates that you are able to operate to the Government's BIM Level 2 requirements with respect to BIM Execution Planning, Asset Management and Security.

Pre-tender Qualification and PAS 91

PAS 91 is a recommended minimum standard for construction procurement, comprising a pre-qualification questionnaire which reduces the need for suppliers to complete the same questions on multiple jobs for different clients. Stroma Certification is now able to offer certification to cover all main areas required to comply with PAS 91 (BIM, ISO 9001, ISO 14001 and OHSAS 18001).

Additional Services

Our service catalogue covers certification and training requirements for energy assessors and installer tradespersons working throughout the built environment. Members are supported with a range of mobile and desktop software tools created in-house by our Stroma Software division.



Contact Stroma Certification

0845 621 11 11 | certification@stroma.com | www.stroma.com/certification
4 Pioneer Way, Castleford, West Yorkshire, WF10 5QU



Software

Stroma Group operations are supported by our in-house software development division, Stroma Software. We employ experts to create desktop, iOS and Android software which assist our staff and clients in achieving business efficiency, energy efficiency and data security.

✓ Products

Formation

Our electronic data capture software allows businesses from any industry to create digital forms on a mobile device. Formation helps you reduce reliance on paperwork and collect data more securely in the field. It connects mobile workers to office staff between the field and back office, with a secure and reliable flow of business critical data.

AVR

Automated Visual Reporting (AVR) Software is an advanced system, developed to increase the efficiency and accuracy of structural examinations with the capability of delivering reports within hours of inspection completion. It brings increased accuracy for a range of highways, rail and bridge structures reports.

RSAP+

The market leader in domestic energy assessment, RSAP+ is used by more than half of UK energy assessors. It is available cross platform allowing energy assessors to lodge Energy Performance Certificates via a desktop computer, tablet device or phone.

SIGMA

A health & safety software tool which allows clients to log safety and compliance inspections. SIGMA supports the work of our accredited workplace health & safety consultants, meaning customers can access information for managed properties.

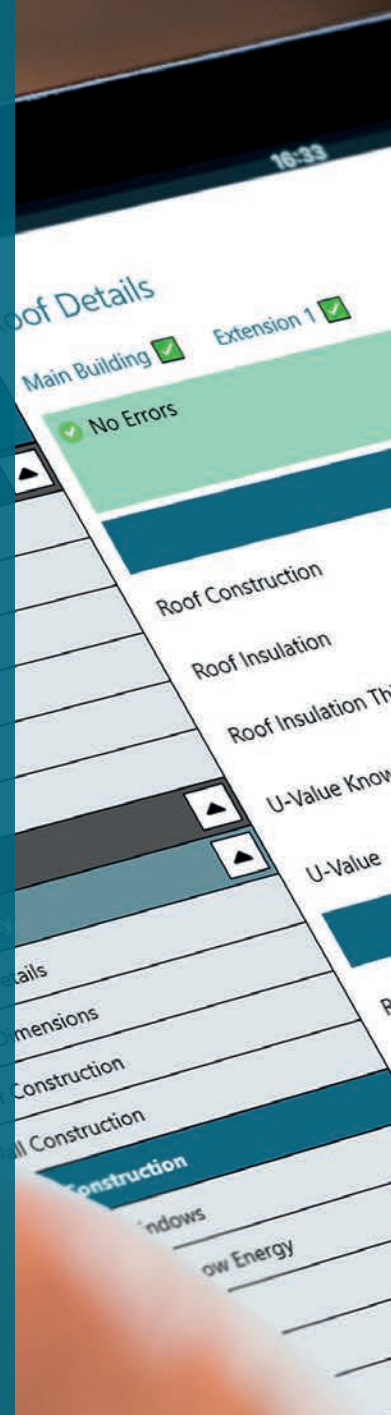
E-CERT

E-Cert was developed specifically for the electrical industry and means electricians can complete standard electrical certificates to the required industry standards.



Contact Stroma Software

0845 621 11 11 | software@stroma.com | www.stroma.com/software
4 Pioneer Way, Castleford, West Yorkshire, WF10 5QU



Find your local office

Bedford
Cannock
Castleford
Central London
Chester
Colchester
Durham
East London
Lamberhurst
Maidstone
Rugby
Sheffield
Truro
Wakefield
Watford
West London



Stroma Head Office

0845 621 11 11 | info@stroma.com | www.stroma.com
4 Pioneer Way, Castleford, West Yorkshire, WF10 5QU

“ Stroma are extremely professional and provide impeccable service. I wouldn't consider using anyone else. ”

A co-ordinated approach to building sustainability and compliance