



INDUSTRY BRIEF

Building Services

Open, efficient building controls
that cut energy and
keep people comfortable.



Control system engineering, integration and analytics since 1997
ISO 9001 certified • Cyber Essentials • CHAS • Constructionline • SafeContractor

www.matrixsystems.co.uk
enquiries@matrixsystems.co.uk
0121 240 7454

YOUR PRIORITIES

What matters most

Commercial and public buildings run heating, cooling, ventilation and lighting every day, under pressure to cut energy use and carbon while keeping occupants comfortable. Many rely on ageing building management systems that are tied to one supplier, hard to change and increasingly connected to corporate networks and the internet.

Lower energy and carbon

Heating, cooling and ventilation are often a building's largest energy use. Good control strategies, schedules and metering cut waste and give you the data to report progress towards net zero.

Comfortable, healthy spaces

Occupants notice when rooms are too hot, too cold or stuffy. Well-tuned control of temperature, ventilation and air quality reduces complaints and calls to the helpdesk.

Open systems you control

Proprietary systems can leave you tied to one supplier. Open protocols such as BACnet, clear documentation and source code let you extend and support it with anyone.

Cyber security

Building systems are increasingly connected to corporate networks and the cloud. Segmented networks and controlled remote access stop them becoming a way into your business.

WHAT WE WORK ON

Systems we engineer

- Building management system upgrades
- Air handling and ventilation control
- Heating, cooling and heat pump plant
- Lighting control integration
- Energy metering, monitoring and reporting
- BACnet, Modbus and third-party integration

PLATFORMS WE WORK WITH

Siemens TIA Portal, S7 and PCS 7 • Rockwell • ABB
• Schneider • Mitsubishi • Beckhoff • Emerson
DeltaV • Honeywell • GE • WinCC, Ignition, AVEVA
(Wonderware), FactoryTalk, iFIX and Citect SCADA

What this means on your project

In an occupied building, people keep working while we do. We plan changes around occupancy with phased cut-overs and temporary control where needed, test new strategies against a simulation before they reach site, and tune them once live. You get the design, code, points schedules and O&M information to run and maintain the system yourselves.

STANDARDS

The standards that shape your project

Customers ask us first about standards. These are the ones we meet most often in this sector, and what they mean in practice.

Standard	What it covers	How we work with it
ISO 16484 series	Building automation and control systems, including the BACnet protocol (ISO 16484-5).	Systems specified, engineered and integrated using BACnet and other open protocols wherever possible.
BS EN ISO 52120-1	How building automation and controls contribute to energy performance, with efficiency classes A to D.	Control functions chosen and documented against the efficiency class you are aiming for.
Building Regulations Part L	Conservation of fuel and power in England, with Approved Document L guidance on controls.	Controls designed to meet Part L and to support your commissioning evidence.
Building Safety Act 2022	For higher-risk buildings, the golden thread of accurate building information kept up to date.	Structured controls documentation and as-built records that can feed your golden thread.
BS 5839-1	Fire detection and alarm systems in non-domestic premises, from design to maintenance.	We design BMS interfaces to the fire alarm, such as plant shutdown, with your fire alarm contractor.
IEC 62443	Cyber security for industrial automation and control systems, increasingly applied to building systems.	Its zones, conduits and security levels shape how we design building networks and remote access.

The standards listed are those most often relevant to control-system work in this sector. Which apply to your project, and how, is agreed with you at specification stage.

The evidence you receive at handover

✓ Functional design specification	✓ I/O list and cause-and-effect	✓ Alarm list and HMI interface
✓ FAT and SAT records	✓ As-built drawings and source code	✓ Method statements for common faults

ABOUT MATRIX

Standards-led, fully documented control systems that you own and can support.

Matrix International (UK) Ltd has designed, built and supported industrial control systems since 1997. We take projects from specification and electrical design, through PLC, DCS and SCADA software, to installation, commissioning and long-term support, and we build the analysis software that shows how a plant is really performing. We are ISO 9001 certified and hold Cyber Essentials, CHAS, Constructionline and SafeContractor accreditation.

Siemens TIA Portal, S7 and PCS 7 • Rockwell • ABB • Schneider • Mitsubishi • Beckhoff • Emerson DeltaV • Honeywell • GE • WinCC, Ignition, AVEVA (Wonderware), FactoryTalk, iFIX and Citect SCADA

HOW WE DELIVER

From specification to long-term support

01 Specify

Requirements, applicable standards and risks agreed with you up front, itemised into a clear plan.

02 Design

Electrical and control design, PLC/DCS and SCADA software, to your standards and ours.

03 Test

Logic proven against a simulated plant, then factory acceptance testing before anything reaches site.

04 Commission

Installation, commissioning and site acceptance testing, planned around your operation.

05 Hand over

Full documentation, method statements for common faults, and training for your team.

06 Support

Maintenance, upgrades and analysis for the life of the system, with 24/7 cover under a support agreement.

WHY MATRIX

Why customers choose us

Standards first

An ISO 9001 certified quality system, designing to the standards your sector demands, plus any you specify.

You own the system

Clear structure, open interfaces and complete documentation, so you can support it yourself or with any vendor.

Tested before site

Control code is version-controlled and tested against a simulated plant before factory and site acceptance.

Multi-vendor

Siemens, Rockwell, ABB, Schneider, Mitsubishi, Beckhoff, Emerson, Honeywell and GE platforms.

In it for the long term

For us a project is not finished until the control system is decommissioned. 24/7 support is available under a support agreement.

OUR PROMISE

Standards-led, fully documented control systems that you own and can support.

Talk to us about your project

enquiries@matrixsystems.co.uk

0121 240 7454

www.matrixsystems.co.uk