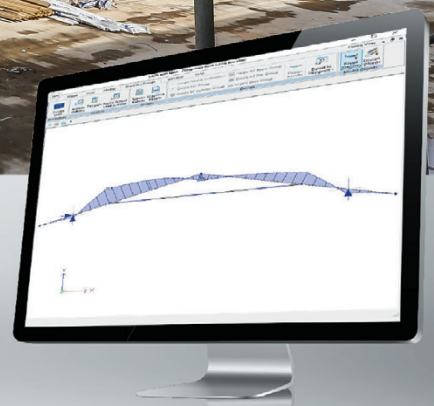
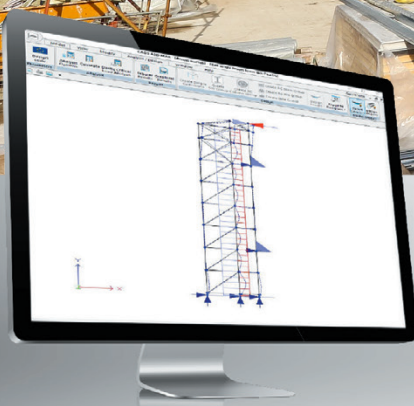




Enigma-is

Scaffold Design & Engineering

● INSIGHT ● INNOVATION ● INCLUSIVITY ● INVESTMENT ● INTEGRITY ●



**Award winning multi-disciplinary In-house
Design & Engineering service**

Nationwide Coverage Provided by 12 Enigma Service Centres around the UK

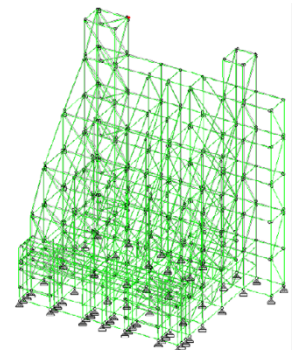
www.enigma-is.com



Enigma's In-house Design & Engineering Department supports clients' projects from inception to completion.

We work collaboratively with our clients to provide economical and innovative solutions that adhere to their specifications and scope. The Enigma in-house Design & Engineering Team provide technical expertise to solve complex access challenges and has gained an invaluable reputation for excellence by utilising the latest design and planning software to deliver safe, reliable projects. Effective communication and careful planning during all phases of a project help to ensure the project time scale is achieved and mitigates unnecessary alterations.

The design team always expect the unexpected and apply value engineering principles to every project to limit unexpected delays. We engage with all stakeholders including; external architects, engineers, contractors, and our internal operational teams, to provide a more collaborative approach. Additionally, we utilise lean design methodology and maximise stock material usage where possible to help reduce our carbon footprint.





Experienced award-winning multi-disciplinary temporary works Design Team.

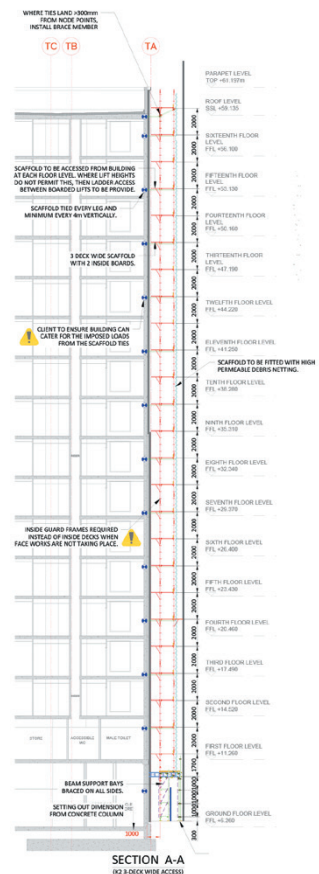
Everyone within the Design Team is a member of the Institution of Civil Engineers to progress and develop their career status by continually undertaking professional training. To ensure they're working towards the latest industry British and European standards, codes of practice and engineering best practice guidance. Collectively the team has extensive and diverse experience working on a wide range of complex projects across all major industry sectors. We utilise traditional tube & fitting along with HAKI, K2 and Kwikstage modular system scaffolding to deliver the most cost-effective solution without compromising safety.

Our talented engineers are academically qualified to honours degree level or equivalent with all apprentices working within the team studying towards achieving BEng Hons Engineering qualifications. At Enigma, all apprentice engineers spend time on client sites to undergo hands-on training, gaining experience on various projects using HAKI, Kwikstage, and tube and fitting by supporting the scaffolders with labouring duties. The on-site training helps our trainee engineer's learn the design process to envisage what they are designing and provides them with valuable knowledge of safe construction and dismantling in line with the CDM regulations.



Consistent, reliable, professional service.

We continually assess and monitor individual Engineer competence and performance by reviewing them against our department job role matrix containing guidance and attributes set out by the Engineering Council. With training provided in-house or externally by recognised providers to support their ongoing professional development. Personal development action plans are created to aid their professional training, and all engineers undergo regular internal SWOT analysis to review their progress. Also, all design procedures are audited internally and externally to BSI ISO 9001:2015 standards. Enigma conducts safety audits following ISO 45001:2018 to ensure risk management and CDM compliance.



Clients benefit from full access to an award-winning design service process.

1. Site Surveys



Enigma provides nationwide coverage, and all Design Team members have undergone relevant health and safety training and hold CSCS or CISRS cards. We are available to attend sites and carry out detailed structural surveys to create accurate design drawings. Also, being present on-site enables the team to liaise with all relevant stakeholders to provide a design solution that meets the needs of all parties involved. Throughout project life-cycles, we can visit sites and discuss scope changes or new requirements. We have the ability and expertise to respond quickly based on your needs to avoid any delays.

2. Feasibility



We start the process by thoroughly discussing and assessing your access requirements so the team can provide sketches and preliminary drawings to create a discussion starting point. To engage all stakeholders by providing a collaborative approach to find the best cost-effective solution that meets everyone's needs.

5. Design Risk Assessment



In compliance with the Construction, Design and Management Regulations 2015 (CDM), Enigma produces a full comprehensive designer's risk assessment in conjunction with the operational risk assessments for every project design. Ensuring all risks are eliminated as far as reasonably practical with any residual risks mitigated and clearly identified on both the drawing and the design risk assessment. We work closely with operation teams constructing scaffolds to ensure a safe erection and dismantle sequence. Communicating any potential residual risks to protect operatives, the general public, the existing structure, and any neighbouring assets.

3. Drawings



All drawings produced by the in-house team are detailed and communicate all necessary information to meet your project specifications. To ensure the temporary structure can be interpreted correctly and safely erected by Enigma's operational teams on-site. The highly detailed views are produced using the latest CAD software, and any residual risks can be clearly identified by operations teams. We provide multiple viewpoints with fully dimensioned drawings to highlight loading and reaction loads information, to safeguard against any miss interpretation.

6. Checking



All designs are subjected to a rigorous checking procedure this is typically a two-part check by the designing engineer followed by the checking engineer. All final checks are done by a senior member of the design team independent from the design production. This type of checking process conforms to BS5975 (Code of practice for temporary works procedures and the permissible stress design of falsework) category one, where it is deemed to be a more complex structure and it aligns to a category two structure. A second independent check is carried out by a senior engineer who wasn't involved with the first two checks. External category three checks are available on request from our approved supply chain.

4. Calculations

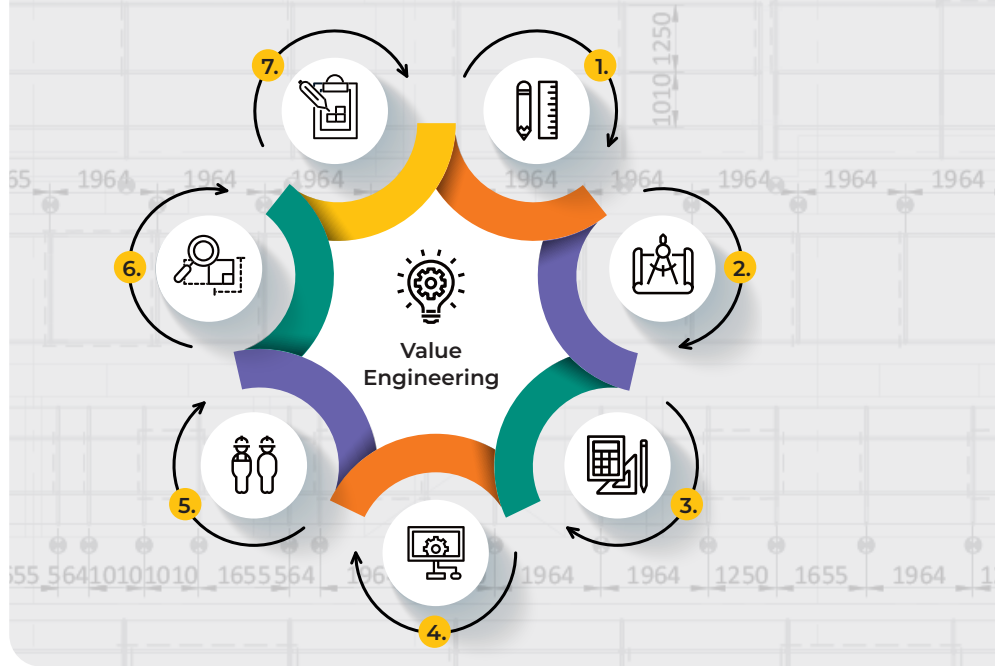


The in-house Design & Engineering Team always undertake a methodical approach to ensure all scaffolding components are thoroughly checked for suitability against the required loadings for the project. A combination of structural analysis packages and in-house software is utilised to account for all the different types of structural loading conditions such as wind, snow and live loadings. All clients are provided with the information so they can assess the impact of the scaffolding on their existing structure.

7. Inspection



All Enigma Design Engineers are either qualified or working towards gaining their CISRS Advanced scaffold & system scaffold inspection that combines industry-standard inspection knowledge with engineering expertise. To provide a different approach to inspection with structures being inspected from an engineering-based bias, allowing technical advice and solutions to be provided on-site. The technical solutions are then supported with either a change to the original design or the provision of a technical design confirmation sheet.



Document change control and accountability

Throughout projects, all changes are recorded, with a corresponding revision code on the design register and task management system. We also include the revision record tables on both the drawing and the calculation documents. Along with information documenting the designer, the person responsible for checking and the dates when completed. All changes follow the same robust checking process procedures applied to the original designs.



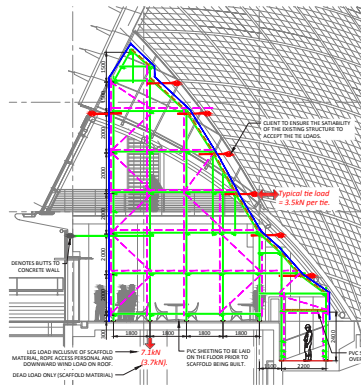
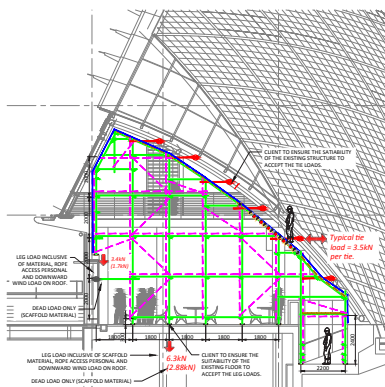


Expertise throughout multiple industry sectors.

The Design Team collectively have 60+ years of experience in supporting multiple market sectors including; Agrochemical, Construction, Energy & Power, Food & Beverage Production, House Building, Industrial Manufacturing, Infrastructure, Petrochemical & Pharmaceutical to support new build, refurbishment, outage or maintenance projects. With the design and erection of bespoke temporary access solutions including; traditional access scaffolds, temporary roofs bridged access, buttressed access, suspended access, public access, shoring scaffolds and façade restraint scaffolds.



Read our case studies online
www.enigma-is.com/projects



The in-house Design Team continually embrace new ideas to give maximum advantage to our clients.

Fraser Freeburn
 Engineering Manager



Temporary Works forum

Promoting best practice in the construction industry.

Achieve new levels of productivity, efficiency and cost savings by using Enigma's in-house Design & Engineering Team with a fully integrated service package.

Enigma-is an active member of the National Access & Scaffolding Confederation (NASC) and Temporary Works Forum (TWF) to keep up to date with the best practice industry guidance. Please view our project case studies online showcasing Enigma's design and engineering expertise.





Contract Scaffolding



Insulation



Protective Coating



Scaffold Hire & Sales



Industrial Cleaning



Head Office:

Hawthorn House
Woodlands Park
Ashton Road
Newton-le-Willows
WA12 0HF

Tel: 0330 678 1199
Email: info@enigma-is.com
Web: www.enigma-is.com

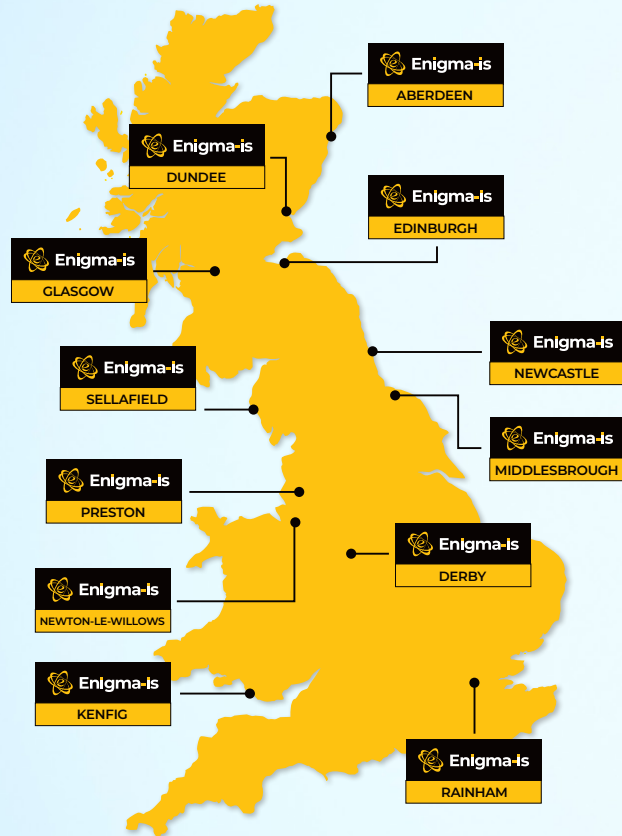
Follow us:



UK DISTRIBUTION PARTNERSHIP

Nationwide Coverage

Provided by 12 Enigma Service Centres around the UK



STOCK

Enigma operates one of the UK's largest scaffolding asset bases with over 2,000 scaffolding and related products available to purchase or hire.

SERVICE

With over 85 year's industry knowledge & experience, Enigma provides an accredited safety first professional service. Ensuring clients benefit from convenient access to simpler and safer systemised solutions and reduced lead times for projects nationwide.

SUPPORT

The In-house QSHE and design & engineering teams provide clients with economical solutions for complex challenges. Including ongoing training, and technical support services through knowledge and resource-sharing practices.

DELIVERY & COLLECTION

Collect stock, or have it delivered, from Enigma Industrial Services depots strategically located around the UK.