



CF CONSTRUCTING
THE FUTURE

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Constructing The Future is SIG's rallying call which inspires its people to deliver added value through technical expertise and unrivalled customer support, reflecting the ever-changing demands of construction. It draws on the group's core differentiators of scale, proximity, expertise and service to help solve our customers' everyday challenges.

ABOUT



Drawing on over 40 years' experience in the construction industry, SIG's Technical Building Solutions team can provide you with all the technical assistance you need to complete your building project in a cost-effective manner and in compliance with all building regulations.

Ireland

SIG Ireland has been a supplier to the Irish Construction Industry for over 20 years, having built up our presence over that time through joint ventures with local entrepreneurs and through acquisition. We are now the largest provider of specialist building products and technical expertise to the construction industry on the island of Ireland, employing over 240 people.

We believe that our continued success and growth is dependent on the dedication and commitment of our staff and the quality of service that we give our customers. We continually strive to achieve our goals by being a 'people' business and recognise that our customers, people and suppliers, are our greatest assets.

Group PLC

SIG is a leading distributor of specialist building products in Europe, with strong positions in its four core product areas of Insulation, Interiors, Roofing and Exteriors. We play an important role in the construction supply chain, where we understand and serve the needs of a very broad range of customers and protect and develop the brands and products of our major suppliers to deliver better solutions. SIG operates from trading sites across the UK, Ireland, France, Germany, Poland and the Benelux, employing around 6,500 people.

Part of **SIG** plc

ABOUT SIG Technical Building Solutions



SIG Technical Building Solutions offers cost effective, and regulatory compliant proposals with impartial product advice to the construction industry.

Our specialist team will provide advice on energy saving construction products and guidance on building regulation compliance. Our complete integrated service gives you unbiased access to thousands of market leading products and solutions, while our intimate knowledge of product performance helps you to make the right choice. We specialise in Thermal, Acoustic, Fire Protection and Moisture management requirements and have access to an unrivalled product range, ensuring your project has the right combination of products to deliver optimal building performance.

Working with colleagues from our parent group SIG Plc, SIG Technical Building Solutions can provide you with cost-effective solutions that meet your technical specifications. This includes managing the sometimes-competing performance criteria of acoustic, fire and thermal design requirements.

SIG Technical Building Solutions can provide guidance to all sectors of the construction industry, including:

- ▶ Residential: Houses, Apartments, Mixed Use and Refurbishment
- ▶ Non Residential: Education, Commercial, Data Centres, Health Care, MoD
- ▶ Timber Frame, Modular, and Off-site Construction
- ▶ Industrial Insulation
- ▶ Passive Fire Protection

Our approach is to provide expert advice and always start the design stage with a 'fabric first' mindset, to achieve the best value.

SIG Technical Building Solutions use the manufacturers' declared product data to calculate and to confirm regulatory compliance, rather than just standard software and regulatory standard defaults.

OUR TEAM

Eoin Rylands

National Technical Manager

Eoin joined SIG in 2018 as a Technical Development Supervisor, prior to taking the role as National Technical Manager responsible for the Technical Building Solutions team in 2021. Eoin and his team are responsible for providing all technical calculations and inspection services, as well as expert advice for the full range offered by SIG.

Eoin worked in the construction industry as a labourer and as a retail manager for many years, before gaining his qualifications and working as a process engineer for Dromone Engineering.

Eoin is a graduate of TU Dublin with degrees in Mechanical and Manufacturing & Design Engineering and has qualifications in Fire Engineering, BIM and Building Regulations, as well as Train the Trainer. Eoin is SIG's lead Passive Fire Protection Inspector.

He enjoys his free time with his young family and splitting his time between scouting and other hobbies.

Michael Neill

Senior Technical Building Consultant

Michael has been with SIG since 2007 and was brought in to setup the technical building solutions team. The aim of the team was to assist the decision-making process in disciplines as varied as Architectural, Engineering, M & E Consultancy, Quantity surveying, Fire protection, Materials Purchase management and Façade consultancy; all under the banner of regulatory compliance.

Michael has over 40 years experience relating to thermal, acoustic and passive fire protection allied to Technical Management and compliance confirmation in the construction industry. Prior to being with SIG, Michael was for 8 years the Technical Manager for the Knauf Group Ireland (Insulation division) and for 6 years, the National Sales Manager for Owens Corning Insulation Ireland.

Michael is a Qualified Insulation Inspector under the Institute of Mechanical Engineers iCorr and is a qualified Firestopping Inspector under the Institute of Fire Safety Management and the Institute of Fire Engineers.

In his spare time, he enjoys family time, water sports, country field sports and ancient history.

Keith Redmond

Technical Building Consultant

Having spent over 40 years in the construction industry, Keith has a wealth of experience. Beginning his career with 12 years in architecture, Keith was involved mainly in health service projects before moving into the commercial world of specification sales, working with several leading manufacturers throughout Ireland.

Joining Richmond Building Products in the mid 90's, Keith became Sales Director before starting his own consultancy practice in 2000. Working throughout the UK and Ireland, the practice specialised in traditional and innovative standing seam roofing and facades solutions, establishing manufacturing, sales, distribution and installation networks.

After working with SIG for some time in a consultancy capacity, Keith joined SIG in 2018 with a focus on Technical & Business Development.

Keira Belmont

Technical Building Consultant

Keira Joined SIG in 2018 as part of the Internal Sales Team for the Insulation portfolio. Before joining SIG, she had over 5 years in the Retail Industry and 1 year in the Furniture Industry.

As the Construction Industry was something new to her and as part of SIG continuous training and development, she was placed on Internal training courses for product knowledge in her portfolio and other portfolios.

This training was provided by the Technical Building Solutions Team and it encouraged her to expand her knowledge and understanding of the Construction Industry and resulted in the opportunity to join SIG Technical Building Solutions.

Since joining the team, she has received qualifications in Passive Fire Protection and a Level 6 Training Delivery and Evaluation Certification and has plans to continue more courses.

In her spare time she enjoys reading, travelling, cooking and hiking.

Jerome Maambong

Junior
Technical Building Consultant

Jerome joined SIG in 2021 as a Junior Technical Consultant. Prior to joining SIG, he had worked in the retail industry for 2 years and 1 year within the construction industry.

Graduating from TU Dublin with a degree in Mechanical Engineering, Jerome worked as a graduate site engineer in Jones Engineering Group, with focus on HVAC systems. Relatively new to the construction industry, he was placed on internal training courses to gain product knowledge and for continuous training and development. Encouraged by professional development opportunities and guidance provided by the team, Jerome is determined to expand his experience and knowledge of the construction industry.

In his spare time, he enjoys photography/ videography, sports, and travelling.

WHO WE WORK WITH



Architects

Our consultants work with architects in designing new buildings and the spaces around them. They also help with the issues raised in the conservation and restoration of old buildings and develop a homogenous approach to required performance requirements. We bring the greatest rewards from being involved in construction projects from the earliest stages right through to completion.

Typical Solutions

- ▶ U value calculations and condensation risk analysis
- ▶ Building element dimension solutions e.g
 - a) reducing the wall dimensions while satisfying regulations
 - b) reducing structural load requirements (Green roofs) and
 - c) reducing water management requirements (Green roof)
- ▶ Energy efficiency
- ▶ Regulatory compliance
- ▶ Gaining CPD points for professional development, our extensive product portfolio allows us to be impartial about product selection
- ▶ Supplying data sheets, product certificates and MSDS for building control
- ▶ Building Control Amendment Regulations (BCAR) and inspection sign off (PFP)



Specifiers

We work closely with Quantity Surveyors and Engineers on their product specification decisions. We can add value to the specification process through the following:

Typical Solutions

- ▶ Reduce time in search for suitable products and solutions
- ▶ Assist in the Shortlisting of products meeting required performance criteria
- ▶ Submit qualified solutions to achieve specific solution requirements
- ▶ Provide calculated and regulatory compliant submittals to aid the design process
- ▶ Provide solutions which set out specification clauses to suit NBS layout

Consultants

The primary role of building consultants is to assist clients with specific technical expertise and knowledge. SIG assists in bringing that specific knowledge together into an homogenised approach which can further expand and deepen the service offering of the building consultant.

Typical Solutions

- ▶ Fire Specialists: Product ratings, test documents, certifications, inspections and manufacturer backed sign off
- ▶ U value and condensation risk analysis calculations
- ▶ Industrial plant and H & V: Heat loss, personnel protection, risk of freezing, energy efficiency of pipe work and tanks calculations
- ▶ Cost effective insulation comparison like for like analysis
- ▶ Calculated acoustic performance of partition and ceiling assemblies



Main Contractors

Main contractors have multiple sub-contractors to manage on a project. We are uniquely placed to offer solutions that increase operator productivity and make cost savings. These same solutions can very often bridge and even reduce the numerous work packages that main contractors must manage.

Typical Solutions

- ▶ Sourcing alternative products: that meet the required performance and compliance criteria from a regulatory and calculation perspective
- ▶ Submit alternate build-ups to walls, floors or roof elements that match structural, thermal, acoustic and fire requirements
- ▶ Advise on requirement for skilled and unskilled application of materials
- ▶ Attend design and progress meetings at site or in office in support and on behalf of main contractors especially on Design & Build projects

Sub-Contractors

The sub-contractors role is often complicated by follow on and preceding trades that add to time pressures. We can advise on alternative cost effective solutions that can reduce the materials application time.

Typical Solutions

- ▶ Sourcing an alternative product backed up with assurance of calculated, tested and regulatory compliant proposals
- ▶ Provision of onsite technical inspection visits, increasing operatives knowledge on required testing and regulations, thereby increasing their persona with the main contractor
- ▶ We can give product training on site via 'tool box talks' or in our own training facilities

THE MARKETS WE OPERATE IN



Residential

SIG Technical Building Solutions Consultants provide services for all construction methods to meet the building regulations. We're focused on providing product solutions that best fit with the preferred method of build and fully appreciate the limitations on space brought about by planning restrictions.

Working to Building Regulations TGD and Technical Booklets

- ▶ Part L ROI and Part F1 NI Conservation of Fuel and Energy Dwellings
- ▶ Part E ROI and Part G NI Sound
- ▶ Part B ROI and Part E NI Fire Safety Vol 2 Dwellings
- ▶ Part F ROI and Part K Ventilation
- ▶ Specific requirements of Government Departments and Client in house construction performance criteria

Non Residential

Our service in this market typically focuses on various elements of a building's energy loss, making recommendations for more cost effective solutions without any reduction in building performance. This is carried out through the use of U Value calculations and condensation risk analysis, alongside heat loss analysis tools. Passive fire protection is provided by a project review process.

Working to Building Regulations TGD and Technical Booklets

- ▶ Part L ROI and Part F2 NI Conservation of Fuel and Energy - Building Other than Dwellings
- ▶ Part E ROI and Part G NI Resistance to the Passage of Sound
- ▶ Part B ROI and Part E NI Fire Safety
- ▶ Part M ROI and Part R NI Access & Use of Buildings



Industrial Sector

Our consultants can aid in product system design based on the industry required standards, with calculation backed proposals covering such areas as: personnel protection, heat recovery, condensation control, CUI, heat flow limitation, and interface temperature prediction. We also provide guidance on passive fire protection for this industry and its inherent complications that arise with industrial locations such as Petro-Chem, Process Manufacturing or Pharmaceutical.

Working to BS Standards

- ▶ **BS 5970:2012**
Thermal insulation of pipework, ductwork, associated equipment and other industrial installations in the temperature range of -100°C to +870°C. Code of practice
- ▶ **BS 5422:2009**
Method for specifying thermal insulating materials for pipes, tanks, vessels, ductwork and equipment operating within the temperature range -40°C to +700°C
- ▶ Part B RoI and Part E NI Fire Safety

Offsite Construction

Offsite construction projects are all subject to additional challenges compared to traditional build. The key issues centre on intelligent choices with regard to cold bridging and careful product selection for the fabric of the building to ensure no internal space is sacrificed for thermal and acoustic performance. Unbiased advice on product selection, utilising detailed thermal modelling for actual performance data will ensure the right products are selected for the right application.

Not normally associated with factory production supply chains, the role of the specialist distributor can bring less obvious benefits:

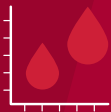
- ▶ SIG Technical Building Solutions provides impartial product advice to improve process efficiency in addition to building performance improvements
- ▶ Deliveries of material just in time from a local supply network can reduce stock holding, i.e. freeing up factory space for added value activities
- ▶ With knowledge of 'Design for Manufacture' SIG Technical Building Solutions can bring a wealth of expertise to the assembly process and the integration of supply chain management

OUR TECHNICAL BUILDING SOLUTIONS



U Value Calculations

We can produce indicative U Value calculations for walls, floors and roofs to help guide you in the selection of materials for these building elements. These calculations will help you understand their thermal performance while also understanding the project constraints be they dimensional constraints or building regulation targets. Our consultants calculate these values using the latest standards and software.



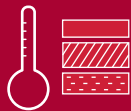
Condensation Risk Analysis

As well as the U-Values, we can carry out a Condensation Risk analysis for those building elements so you have a full understanding of their performance and the detrimental impact of moisture on both the fabric of the building and the occupants health so that you are in compliance with the Building Regulations.



Acoustic Calculations

We can provide indicative results based on client detailing of walls, floors and roofs. Our results can then also include recommended products and treatments to enhance the acoustic performance. All in accordance with current standards and regulatory requirements.



Industrial Insulation Analysis

We can offer an array of calculated solutions to answer, heat loss, frost protection, personnel protection, heat flow limitation, and condensation control for pipework and ducting within the industrial process industry.



Passive Fire Protection Design

Our consultants will assist in the design of passive fire protection measures all to current standards and building regulations. We focus on fire protection to structural steel work, service penetrations, fire barrier material recommendations, and fire resistant coatings and facing material recommendations, fire rated partition systems and cavity barriers.



Site Inspections & Certification

We offer site inspections and certification under either BC(a)R or a Letter of Compliance on behalf of the manufacturer to offer you a level of comfort, that materials being supplied to site and installed will meet both the manufacturers details and the Building Regulations.



Roofing Estimations & Take Off's

We can produce Estimations & Take Off's of roofing material quantities in compliance with building regulations from drawings provided, for all domestic and commercial projects.

TESTIMONIALS

ARCHITECTS



Daragh Coleman, Director - TODD Architects

"We are pleased to have been associated with SIG'S Technical Team and have always found their breadth of knowledge in construction materials and regulatory compliance guidance invaluable in the design process. Their expertise and support across all aspects of building design and performance has been of immense assistance to us."



Michael O'Connor, Associate - McAdam Design

"We use SIG calculation service for U-Value and con risk calculations to help steer our design process to help optimise the thermal performance of our designs."

ENGINEERS



Thomas Campbell, Director - TA Group

"It has been great working with SIG's Tech Team. We have always found them to be very helpful and their breadth of knowledge in the performance criteria of construction materials and knowledge of regulatory compliance has been of great assistance for us. SIGs on-site inspection service is a real plus and ensures the most appropriate product is always selected."

MAIN CONTRACTORS



Brian Connelly, Design Manager - J J Rhatigan

"It has been great working with SIG's Tech Team, we have always found them to be very helpful and their in-depth knowledge of construction products and the building regs has been of great assistance for us."

SPECIALIST CONTRACTORS



Francis O'Reilly, MD - Cymar Ltd.

"The guys in the team are great, we use them to help with our passive fire protection problems coming up with product solutions. We also use them also to inspect and certify our installations."



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