

# sigmat

STRUCTURAL STEEL FRAMES FOR LUXURY HOMES



[WWW.SIGMAT.CO.UK](http://WWW.SIGMAT.CO.UK)



## EXPERTS IN LUXURY STEEL FRAMES

Forefront Contractors have partnered with Sigmat, UK leaders in light gauge steel framing, to offer a cost-efficient and faster alternative to traditional building methods.

We design, manufacture, and assemble all under one roof, and install load-bearing light gauge steel framing solutions of the highest quality at your site. With over 18 years of extensive experience and industry knowledge.

Combining engineering excellence, design expertise, and unrivalled manufacturing capabilities we offer light gauge steel framing solutions. From design through to installation, all our employees are in-house and highly skilled, delivering quality results.

The Sigmat range of bespoke luxury housing offer three standard type frames designed to provide the maximum number of finished styles. The range consists of three standard frames in 350sqm, 445sqm and 660sqm, with a variety of stylised finishes in Contemporary, Georgian and Hybrid styles. A range of optional extras allow for customisation, providing the perfect bespoke home to suit individual preferences.

Sigmat standard frame types benefit from less than 2 weeks on site build time, whilst providing unmatched quality steel framing homes.





## WHY CHOOSE STEEL FRAME CONSTRUCTION?



### Speed of Build

The Sigmat Bespoke Housing solution boasts speed of build as a key benefit - with up to 660sqm framing installed onsite in just 14 days, and follow-on trades able to commence earlier than traditional. Providing programme surety and reduced timescales.



### Sustainability

As a key solution in MMC and Offsite Construction, Light Gauge Steel Framing is fully recyclable. Enhance your “Green Credentials” compared to traditional methods with larger carbon footprints.



### Modern Technology

Using new technology to ensure accuracy, precision and guaranteed timescales compared to traditional bricks and mortar solution.



### Pre-Installed Windows

Sigmat panels can be delivered direct to site complete with windows installed, helping to speed up the build process.



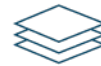
### Reduced Fire Hazard and associated costs

Reduced fire risk v the nature of timber framing, the Sigmat concrete floors also add an extra level of protection providing added ‘peace of mind’ for the occupant. Timber framing generally has high in-built fire protection costs.



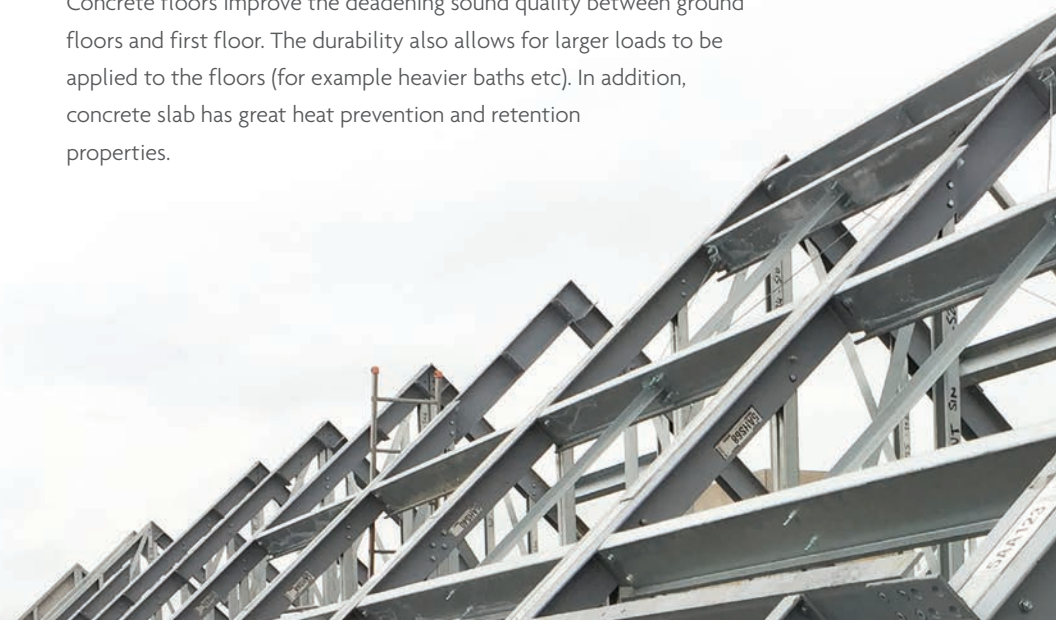
### Post Completion Movement

The Sigmat System offers no settlement, no timber joists moving or drying out eliminating the snags for the end user, resulting in happy customers. Settlement deflection on a typical timber frame can be up to 8mm per floor.



### Concrete Floors

Concrete floors improve the deadening sound quality between ground floors and first floor. The durability also allows for larger loads to be applied to the floors (for example heavier baths etc). In addition, concrete slab has great heat prevention and retention properties.





## UNLIMITED SCOPE FOR DESIGN CREATIVITY

One Sigmat frame allows multiple style and design options, each house can be bespoke to your taste but benefit from the frame economies of scale.

The standard Sigmat frame offers multiple styling options including Contemporary, Hybrid, Georgian and Arts & Crafts.





# VALERIA

Product Code: BSH350A

350m<sup>2</sup>, two-storey luxury home



On site build time:  
**14 days**



## Gross Internal Floor Area

Ground Floor:	155m <sup>2</sup>
First Floor:	195m <sup>2</sup>
Gross Area (inc garage):	420m
Net Area (exc garage):	350m <sup>2</sup> (3767sqft)

## Key Features

- ◆ 5 bedrooms, 3 ensuites
- ◆ Built over 2 floors with room height of 2.7m on ground and first floor
- ◆ Double integral garage - designed to accommodate two 4x4 cars
- ◆ High spec 'Sigmat Wall Panel' construction on internal and external walls
- ◆ Robust 180mm trapezoidal concrete floor construction on first floor

## VALERIA - ALTERNATIVE STYLES

ONE FRAME ALLOWS MULTIPLE STYLE AND DESIGN OPTIONS



Georgian  
Product Code: BSH350B



Contemporary  
Product Code: BSH350C

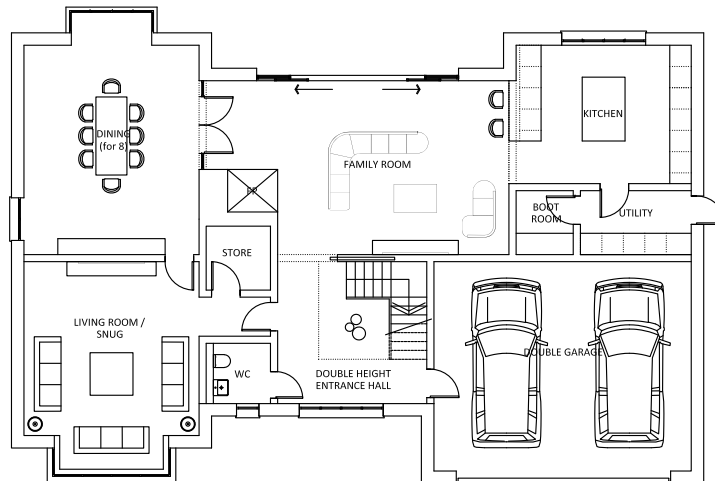


Arts & Crafts  
Product Code: BSH350D

### VALERIA FLOOR PLAN

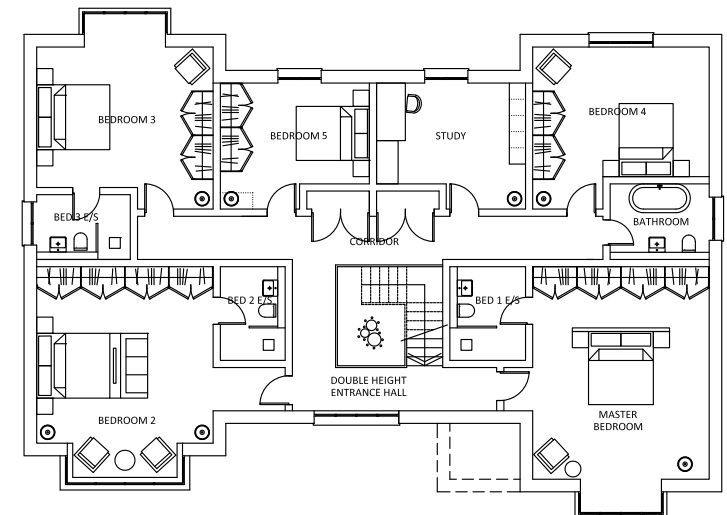
#### Ground Floor

1. Entrance
2. Living Room
3. Dining Room
4. Family Room
5. Kitchen
6. Utility
7. WC
8. Double Garage
9. Store
10. Utility
11. Boot Room



#### First Floor

1. Master Bedroom & Ensuite
2. Bedroom 2 & Ensuite
3. Bedroom 3 & Ensuite
4. Bedroom 4
5. Bedroom 5
6. Study
7. Bathroom





# MAGNUS

Product Code: BSH455A

445m<sup>2</sup> , two-storey luxury home



On site build time:

**14 days**

## Gross Internal Floor Area

Ground Floor:	235m <sup>2</sup>
First Floor:	210m <sup>2</sup>
Gross Area (inc garage):	585m <sup>2</sup>
Net Area (exc garage):	445m <sup>2</sup> (4897sqft)

## Key Features

- ◆ 6 bedrooms, 4 ensuites
- ◆ Built over 2 floors with room height of 2.7m on ground and first floor
- ◆ Double garage- designed to accommodate two 4x4 cars
- ◆ High spec 'Sigmat Wall Panel' construction on internal and external walls
- ◆ Robust 180mm trapezoidal concrete floor construction on first and second floor
- ◆ Roof structure formed ready for felt, batten and tile/slate finishes



## MAGNUS - ALTERNATIVE STYLES

ONE FRAME ALLOWS MULTIPLE STYLE AND DESIGN OPTIONS



Georgian  
Product Code: BSH455B



Hybrid  
Product Code: BSH455C

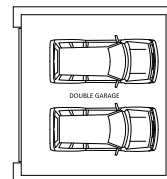
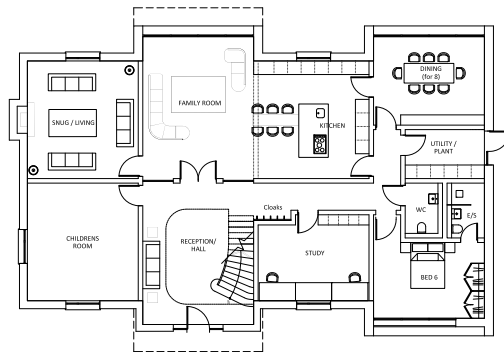


Arts & Crafts  
Product Code: BSH455D

### MAGNUS FLOOR PLAN

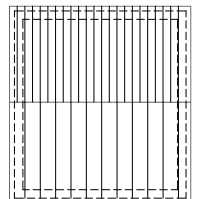
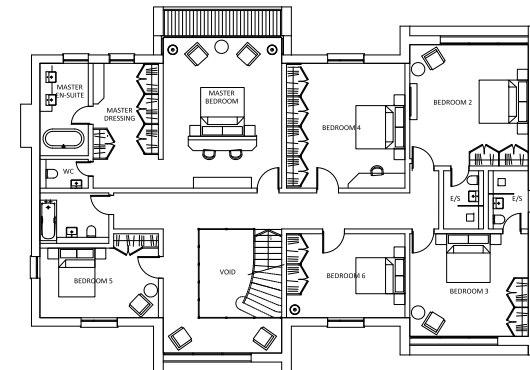
#### Ground Floor

1. Entrance Hall
2. Family Room
3. Living Room
4. Childrens Room
5. Kitchen
6. Dining Room
7. Study
8. Utility Room
9. Bedroom + Ensuite
10. WC
11. Double Garage



#### First Floor

1. Master Bedroom
2. Master Ensuite and Dressing
3. Bedroom 2 + Ensuite
4. Bedroom 3 + Ensuite
5. Bedroom 4
6. Bedroom 5
7. Bedroom 6
8. Bathroom





# TITUS

Product Code: BSH660A

660m<sup>2</sup> , three-storey luxury home



On site build time:  
**14 days**

## Gross Internal Floor Area

Ground Floor:	260m <sup>2</sup>
First Floor:	360m <sup>2</sup>
Second Floor:	40m <sup>2</sup>
Total (exc garage):	660m <sup>2</sup> (7104sqft)

## Key Features

- ◆ 7 bedrooms, 3 en-suites
- ◆ Guest annex over the double garage
- ◆ Built over 3 floors with room height of 2.7m on ground and first floor
- ◆ 2 x Double Garage - accommodate four 4x4 cars
- ◆ High spec 'Sigmat Wall Panel' construction on internal and external walls
- ◆ Robust 180mm trapezoidal concrete floor construction on first and second floor
- ◆ Roof structure formed ready for felt, batten and tile/slate



# TITUS - ALTERNATIVE STYLES

ONE FRAME ALLOWS MULTIPLE STYLE AND DESIGN OPTIONS



Arts & Crafts  
Product Code: BSH660B



Contemporary  
Product Code: BSH660C



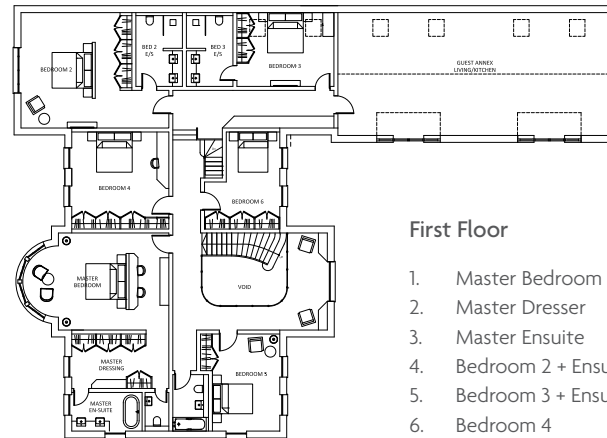
Hybrid  
Product Code: BSH660D

## TITUS FLOOR PLAN



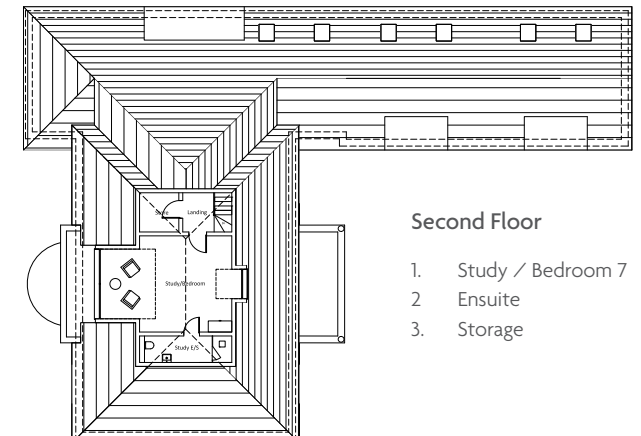
### Ground Floor

1. Entrance
2. Dining Room
3. Kitchen
4. Family Room
5. Snug
6. Childrens Room
7. Cinema
8. Utility
9. Study
10. 2 x Double Garage



### First Floor

1. Master Bedroom
2. Master Dresser
3. Master Ensuite
4. Bedroom 2 + Ensuite
5. Bedroom 3 + Ensuite
6. Bedroom 4
7. Bedroom 5
8. Bedroom 6
9. Bathroom
10. Guest Annex with Living and Kitchen



### Second Floor

1. Study / Bedroom 7
2. Ensuite
3. Storage

## TECHNICAL SPECIFICATION

Our innovative profiles offer improved structural performance by providing greater frame strength and buildability benefits.



### External Walls

- ◆ Galvanised external walls panels to Sigmat specification. Includes all steel studs and trackways to form structural openings.
- ◆ 100mm x 50mm stud (S450 grade galvanised steel) and frame panels
- ◆ Sheathed with 9mm cellulose fibre cement board
- ◆ 100mm PIR insulation
- ◆ Brick, block or similar tie channels fitted to facilitate external cladding solution

### Internal Walls

- ◆ Galvanised internal walls panels to Sigmat specification. Includes Patented panel head 'top hat' and cross bracing. Panels ready to receive internal plasterboard by others
- ◆ 100mm x 50mm stud (S450 grade galvanised steel) and frame panels







#### Roof Construction

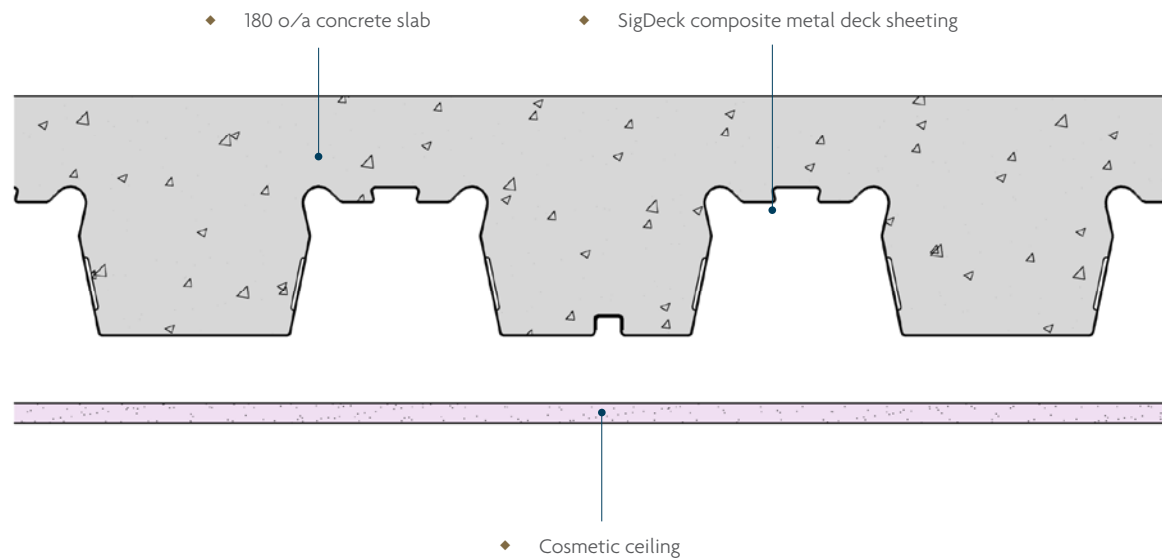
- ◆ Steelwork primary support frame
- ◆ S24 Treated Timber rafters
- ◆ Warm roof construction can be achieved by fitting insulation between rafters

#### Floor Construction

- ◆ 180mm deep reinforced concrete slab on composite metal decking, Grade C40/32 concrete
- ◆ Fire and Acoustic performance provided by the slab, no reliance on the cosmetic ceiling below



## TECHNICAL SPECIFICATION: THERMAL, ACOUSTIC & FIRE TESTING DATA

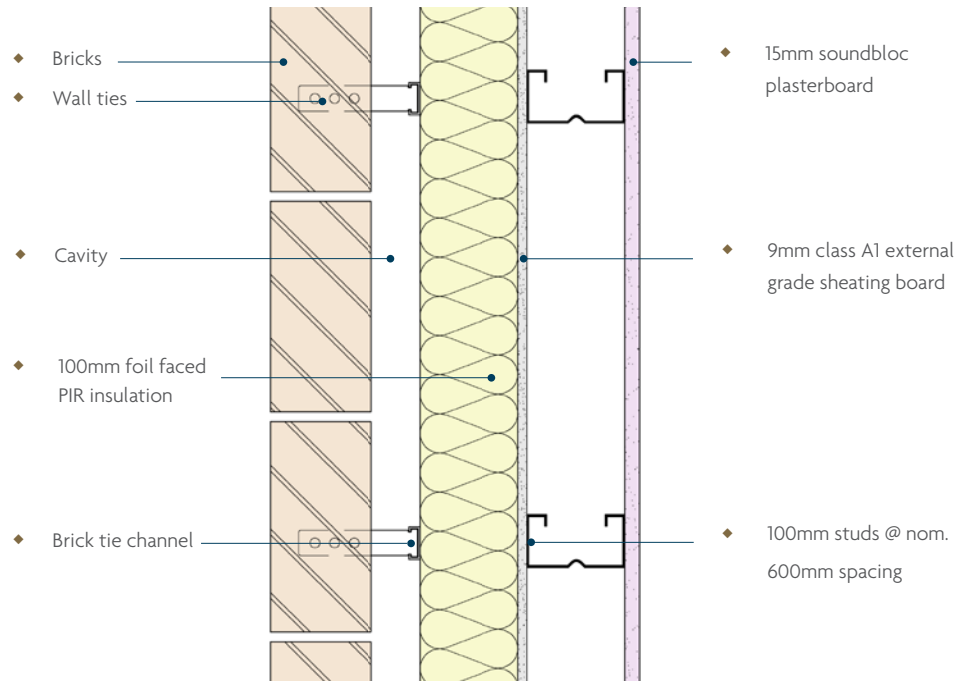


- ◆ 180mm
- ◆ Minimum acoustic performance = 49 (Rw) db
- ◆ Minimum fire rating = 30 minutes



## TECHNICAL SPECIFICATION: THERMAL, ACOUSTIC & FIRE TESTING DATA

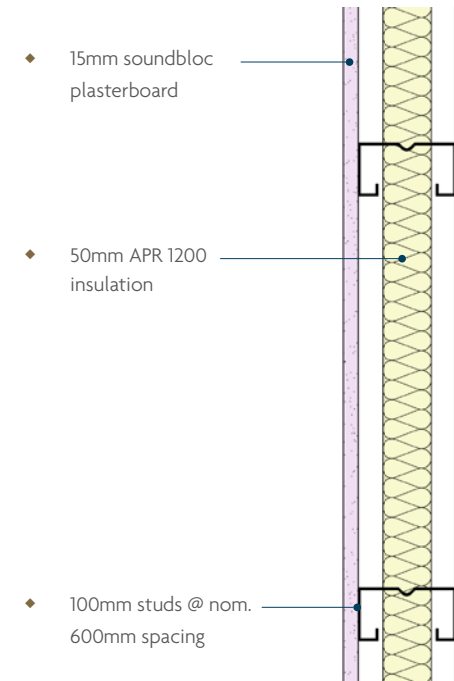
### External Walls



PLAN VIEW

- ◆ Thermal performance =  $0.18\text{W/m}^2\text{k}$
- ◆ Fire rating = 30 minutes

### Internal Walls



PLAN VIEW

- ◆ Acoustic performance = 46 (Rw) dB
- ◆ Fire rating = 30 minutes

## KEY PRODUCT SUPPLY CHAIN PARTNER WINDOWS & DOORS - RED SYSTEMS LIMITED

RED Systems is dedicated to providing the discerning British homeowner with the very best products, combining style and performance without compromise.



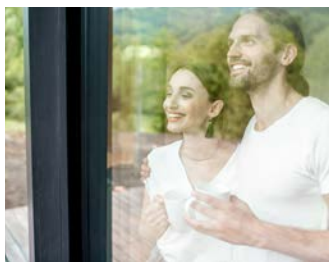
### THE HIGH QUALITY, ENERGY EFFICIENT CHOICE

Comfort, security, architectural design, weather resistance and energy-efficiency are all essential elements of the RED Product range.

Aluminium is one of the most versatile building materials available and RED offer products utilising a high recycled content, long lifespan, low maintenance and high thermal efficiency with new thermal break technology. It is the ideal solution for bespoke designs that create unique, highly efficient and beautiful homes using one of today's most durable and sustainable materials.

#### Product Range

- ◆ Bifold Doors
- ◆ Sliding Patio Doors
- ◆ Aluminium Windows
- ◆ Aluminium Doors
- ◆ Aluminium Glazed Walls



0845 345 8772 | [sales@redsystems.co.uk](mailto:sales@redsystems.co.uk) | [redsystems.co.uk](https://redsystems.co.uk)





## KEY PRODUCT SUPPLY CHAIN PARTNER RENEWABLE ENERGY - RES DISTRIBUTION

Personalise your home with these optional extras to suit your taste and lifestyle. Available for all house types.



### RENEWABLE HEATING AND HOT WATER PLANT ROOM POD

Introducing the Plant Room Pod by RES Distribution. An innovative system, designed bespoke for the Sigmat Luxury Housing Solution. RES Distribution systems are manufactured to MCS installation standards MIS3005 and include full design, supply and installation. The prefabricated technology allows for efficient install.



MCS accredited supplier



Minimise running costs and claim up to £32,200 of RHI payments with our support



Innovative Technology



Lower carbon emission technology



Fully integrated to Sigmat's house design



Efficient install due to offsite manufactured pod technology



UFH provides superior levels of comfort

01935 421198 | [sales@res-distribution.com](mailto:sales@res-distribution.com) | [res-distribution.com](http://res-distribution.com)



## KEY PRODUCT SUPPLY CHAIN PARTNER BRICKWORK AND CLADDING - RCM LIMITED

RCM's innovative building boards and cladding systems provide high quality solutions to the UK housing market.



RCM provides complete through wall solution to the UK residential market, supplying specialist building boards, façades, breather membranes and airtightness solutions, offering a fully integrated approach to the building envelope for all building applications.

As part of the Benx Group, we can offer one of the widest ranges of façade products and systems to the residential sector. Our portfolio includes market-leading renders, brick-slip systems, sheathing boards, and fixings.

### FOCUS ON QUALITY

We work closely with our UK and international supply chain partners to ensure we offer consistently high-quality products and systems. With industry-leading accreditation, certification, and technical support.



[www.benx.co.uk](http://www.benx.co.uk) | 01728 940 895





## SUSTAINABILITY

We are committed to sustainability and recognise its significance to our on-going success.

Concern for the environment and promoting a broader sustainability agenda are integral to our core values.

We are committed to creating and maintaining good sustainable practises which reduce environmental impact to our activities and of each project.



It is well known that steel is one of the world's most recycled materials with a potential recovery and re-use factor in excess of 90%



Light gauge framed steel structures are substantially lighter than traditional steel framed buildings allowing significant reduction in the weight of steel used.

**6.6%**  
less steel than  
a HRS frame

**53%**  
lighter than a similar  
concrete frame



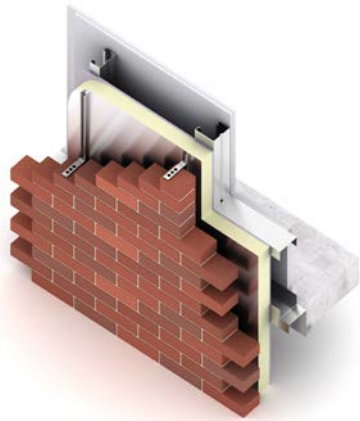
Steel framed structures are the predominant form of construction for multi-storey buildings



Substantial reduction in the overall carbon footprint of a building.

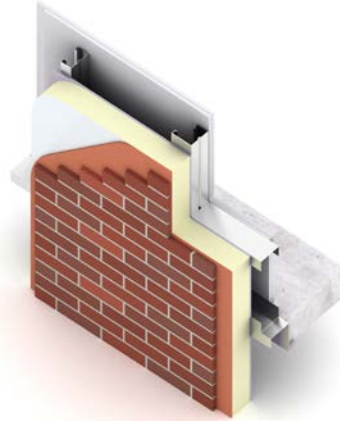
## EXTERNAL WALL RENDERING SOLUTIONS

Final finishing options for external walls. Example of four popular types below.



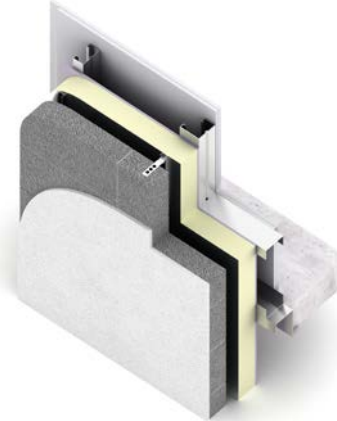
### Brick

The Sigmat pre-panelised loadbearing wall forms part of an insulated cavity wall system prior to the addition of a single outer leaf of brickwork. The walls are supplied with a 9mm class A1 sheathing board & typically 100mm thick PIR Insulation. It is preassembled off-site in our factory to enhance quality, speed and safety. All Sigmat panels are designed to include pre-formed door and window openings and inner face is ready for the direct application of plasterboard lining finishes.



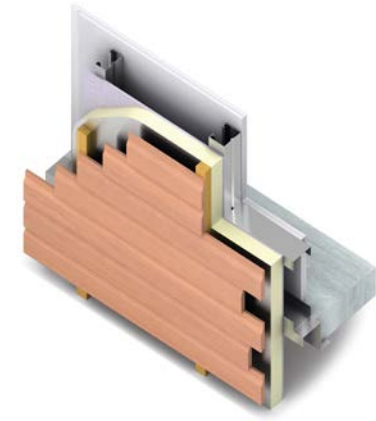
### Brick Slip

The Sigmat pre-panelised loadbearing wall forms part of an installation-ready external wall system prior to the addition of a outer leaf of brick slip system. The walls are supplied with a 9mm class A1 sheathing board. It is preassembled off-site in our factory to enhance quality, speed and safety. All Sigmat panels are designed to include pre-formed door and window openings and inner face is ready for the direct application of plasterboard lining finishes.



### Render

The Sigmat pre-panelised loadbearing wall forms part of an insulated cavity wall system prior to the addition of a single outer leaf of blockwork & render. The walls are supplied with a 9mm class A1 sheathing board & typically 100mm thick PIR Insulation. It is preassembled off-site in our factory to enhance quality, speed and safety. All Sigmat panels are designed to include pre-formed door and window openings and inner face is ready for the direct application of plasterboard lining finishes.



### Timber

The Sigmat pre-panelised loadbearing wall forms part of an insulated external wall system prior to the addition of a sub-grid and timber cladding. The walls are supplied with a 9mm class A1 sheathing board typically 100mm thick PIR Insulation. It is preassembled off-site in our factory to enhance quality, speed and safety. All Sigmat panels are designed to include pre-formed door and window openings and inner face is ready for the direct application of plasterboard lining finishes.





## 4 STEP PROCESS

### ◆ DESIGN

Our in-house design teams work closely to ensure we find a bespoke solution that optimises performance, value for money and ease of installation.

### ◆ MANUFACTURE

Manufactured in-house at our Leeds Manufacturing Facility providing quality and accuracy.

### ◆ ASSEMBLE

Our controlled offsite assembly facility enables us to pre-assemble our load bearing frames to storey height prior to delivery.

### ◆ INSTALL

Installed on site by an experienced Sigmat team, Sigmat light gauge steel frames benefit from rapid construction enabling follow on trades to begin at the earliest opportunity.



## OUR LOCATIONS







## GET IN TOUCH

T: 01756 701 522

E: [enquiries@sigmat.co.uk](mailto:enquiries@sigmat.co.uk)

[www.sigmat.co.uk](http://www.sigmat.co.uk)

[info@forefrontcontractors.co.uk](mailto:info@forefrontcontractors.co.uk)

## WHERE TO FIND US

### HEAD OFFICE

Unit 2  
Acorn Business Park,  
Airedale Business Centre,  
Keighley Road, Skipton,  
BD23 2UE

### MANUFACTURING FACILITY

Unit A  
Cross Green Close  
Leeds  
West Yorkshire  
LS9 0RY

### CONTRACT SUPPORT CENTRE

1 Crossland Park  
Cross Green Way  
Leeds  
West Yorkshire  
LS9 0SE

### R&D CENTRE

Nicholas House  
Heath Park  
Crothorne  
Worcestershire  
WR10 3NE

### GLASGOW REGIONAL OFFICE

Suite 1.01  
Innovation Centre  
1 Ainslie Road  
Glasgow  
G52 4RU

### ELLAND REGIONAL OFFICE

Gannex House  
Gannex Park  
Dewsbury Road  
Elland  
HX5 9AF

### TEESSIDE REGIONAL OFFICE

Wynyard Park House  
Wynyard Business Park  
Wynyard Avenue  
Billingham  
TS22 5TB

### SOUTH-WEST

4 Keward Mill Way  
Wells  
Somerset  
BA51PZ

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