

CONCRETE SOLUTIONS

Welcome to Lyncx Precast

We operate a **large capacity state of the art UK manufacturing facility** producing UKCA marked quality products. Our precast products are supplied to all sectors of the UK construction industry, customers include Housebuilders, Main Contractors, Groundworkers, Civil Engineering Contractors, Builders Merchants and Self Builders.

We offer products on either a supply only or supply and installation basis. Our experienced fixing teams are fully trained and qualified and we pride ourselves on our high level of customer service and reliability.

How can we help

- ✓ **Practical advice and project management**
- ✓ **Quick estimates and accurate quotations**
- ✓ **Comprehensive product range**
- ✓ **Quality and reliability**
- ✓ **Value engineering**
- ✓ **Site visits, RAMS and crane lift plans**
- ✓ **Secure supply chain partner**

We recognise and value the contribution of our greatest asset, our employees. We are committed to continuous development by providing the training, qualifications, and skills to keep pace with the changing construction environment and adopting the highest standards of safety and quality.



Proud to be one of the UK's leading precast concrete manufacturers

Established in January 2014 with sales and design offices in Wakefield, West Yorkshire and Ashington near Newcastle upon Tyne. Lynx Precast design, manufacture and install precast concrete flooring systems and reinforced concrete products. These include beam and block, insulated beam and block, hollowcore slab, stairs and landings, ground beams and liftshafts.

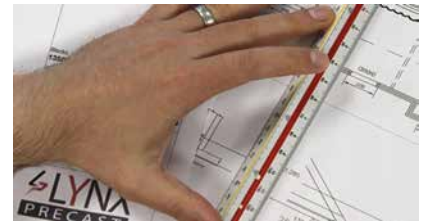


We operate a 140000 ft² modern manufacturing facility which is equipped with the latest and most technologically advanced machinery available. Our highly qualified Engineers use bespoke software to provide installation drawings and structural calculations to suit each individual job. We are passionate about what we do and focus our priorities on quality, service and customer support.

Sales & Estimating/Consultation

Our sales and estimating team have a comprehensive knowledge of our products and their applications. We aim to provide accurate estimates, competitive pricing and quick response. We offer support and advice to engineers, architects and builders to ensure our floors, stairs and other products are easily incorporated into the build.

We provide design and technical advice to ensure the selection of products and specification is suitable for the building design and application. We can advise at an early stage on the practicalities and method of installation considering the construction and environment in which the building is to be constructed. Each member of our design team has spent time in our estimating department. It is this understanding and knowledge of our industry that enables our designers to offer Value Engineering throughout the duration of your project.



Design & Technical

Our Technical team can advise on how we design, plan and install our precast concrete products into your project. The use of advanced 3D design programs are fully integrated into our factory manufacture and planning programs ensuring our concrete products are accurate and of the highest standard. Each project is allocated a dedicated member of our team meaning that you have the same contact throughout.



Manufacturing

All products are manufactured in our state of the art manufacturing facility in Ashington just north of Newcastle upon Tyne using the most technologically advanced machines and processes available. All products are UKCA marked and each individual unit is identified with a unique batch code for full traceability. Quality and environmental management systems are certified to ISO 9001 & 14001.



Delivery

Each customer and site have different delivery requirements and expectations when ordering our precast concrete products, vehicles must be specified to suit. Our rear wheel steer short articulated vehicles have been able to access some very restricted city centre sites. We operate the following vehicles in order to satisfy specific product delivery requirements:

- Standard Artic
- Short Artic
- Short Artic with rear wheel steer
- Crane offload Artic with rear wheel steer
- Crane offload wagon and drag
- Crane offload rigid
- Standard rigid



Installation

Highly qualified experienced fixing teams install our products accurately and safely to the highest standards. All installers are CSCS qualified, each team has a slinger banksman and crane supervisor. A designated Contracts Supervisor qualified as an appointed person will visit your site prior to each installation and provide the following:

- Practical Advice and Project Management
- Site Specific Method Statements and Risk Assessments
- Crane Lift Plans
- Health & Safety Manuals

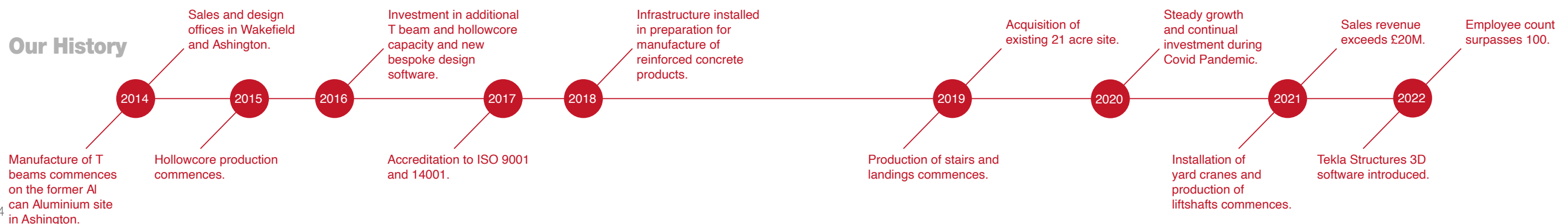
We will agree installation dates and arrange co-ordination of cranes, and delivery vehicles to ensure your project runs smoothly and to program.



Investment in people, software systems and manufacturing infrastructure ensure Lynx Precast maintains high levels of productivity offering competitive prices and quality products to meet the demands of our customers.

Financial stability, reliability, quality and trust make us a secure and creditworthy supply chain partner.

Our History





BEAM AND BLOCK



Beam and Block

At Lynx Precast we have years of combined experience designing, manufacturing, and installing precast concrete beam and block flooring systems.

Our prestressed beams are made in a factory controlled environment resulting in a high quality finish and dimensional accuracy. All beams are clearly marked with a production date, dimensions and weight and manufactured in accordance with relevant British and European Standards.

Produced in 150mm or 225mm depth and increments in length of 50mm. They are used in conjunction with 100mm concrete infill blocks and spaced to suit the required span/load of a building.

Beam and block flooring is quick, easy, and economical to install in all weather conditions without the need for skilled labour. If required we can provide a full supply and installation service using our experienced fixing teams.



Benefits

- Cost effective Beam and Block floor systems
- Quick and easy installation
- No special skills or tradesmen required
- Immediate working platform
- High quality factory manufactured precast concrete products
- Can be constructed in all weathers
- Designed to resist rot
- ½ hour or 1 hour fire resistance
- Service pipe penetrations easy to accommodate
- Concrete floors can be designed to carry load bearing partitions potentially reducing foundations
- Clear spans up to 8m
- UKCA marked

Applications

- Ground and upper floors
- Domestic
- Residential
- Commercial
- Industrial buildings

Load spans

Our design team can give advice on span load capacities and beam depths for any application. Floor design layouts are provided with all orders and are easy to follow. The floors must be laid in accordance with the drawing supplied and structural calculations can be provided on request.

Beam and block Load Spans

CS120

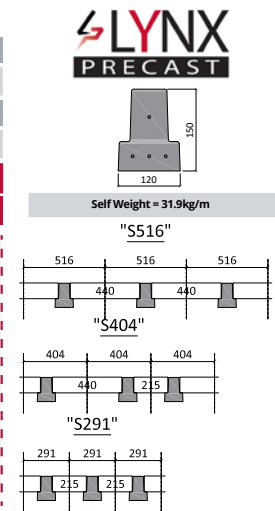
Beam and Block Load Span Tables (m)

CS120

Beam and Block
Load Span Tables (m)

Dead Load (kN/m ²)	
1.57 (75mm Lightweight Screed & Finishes) + 0.04 (75mm Insulation)	2.40 (100mm Conc)
Partition Allowance (kN/m ²)	
0.50	1.00
Garage 9kN (point)	

Imposed Load (kN/m ²)							
Configuration	1.50	2.00	3.00	4.00	5.00	7.50	2.50
S516	4.234	3.885	3.597	3.184	2.816	2.177	3.407
S404	4.747	4.365	4.048	3.781	3.550	2.785	3.758
S291	5.300	5.073	4.720	4.417	4.165	3.682	4.105



CS160

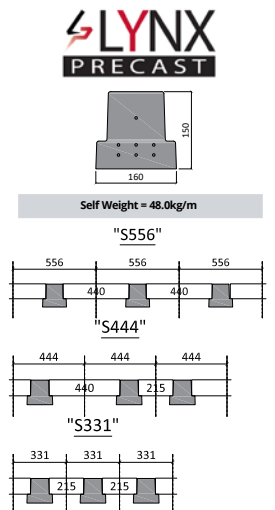
Beam and Block Load Span Tables (m)

CS160

Beam and Block
Load Span Tables (m)

Dead Load (kN/m²)	
1.57 (75mm Lightweight Screed & Finishes) + 0.04 (75mm Insulation)	2.40 (100mm Conc)
Partition Allowance (kN/m²)	
0.50	1.00
Garage 9kN (point)	

Imposed Load (kN/m²)							
Configuration	1.50	2.00	3.00	4.00	5.00	7.50	2.50
S556	5.127	4.716	4.390	4.121	3.896	3.444	4.597
S444	5.675	5.232	4.878	4.586	4.340	3.862	4.956
S331	6.300	5.960	5.570	5.247	4.974	4.440	5.423



CS225

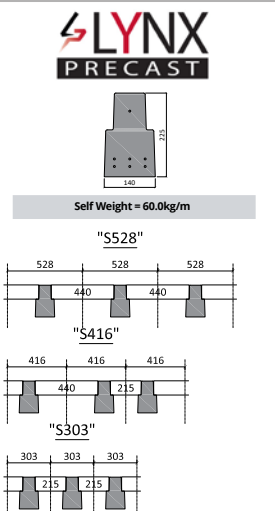
Beam and Block Load Span Tables (m)

CS250

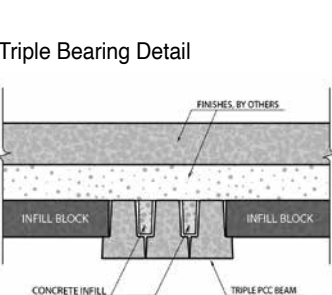
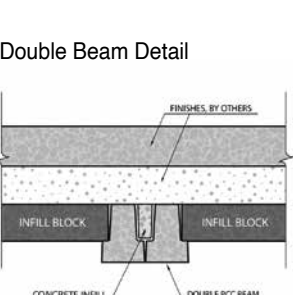
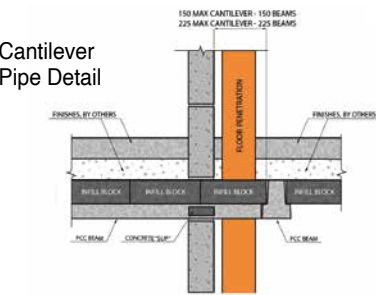
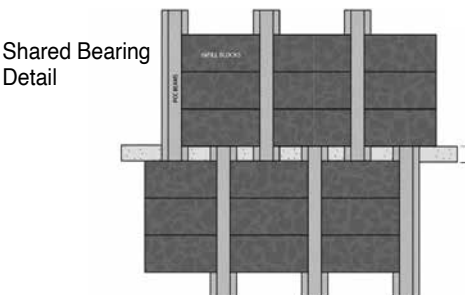
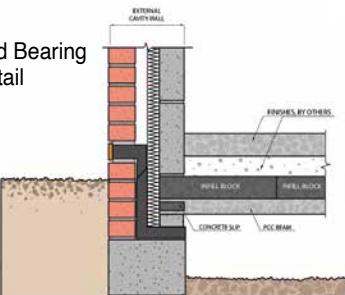
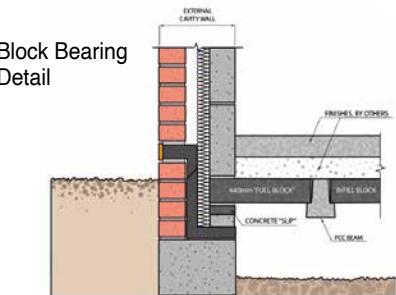
Beam and Block
Load Span Tables (m)

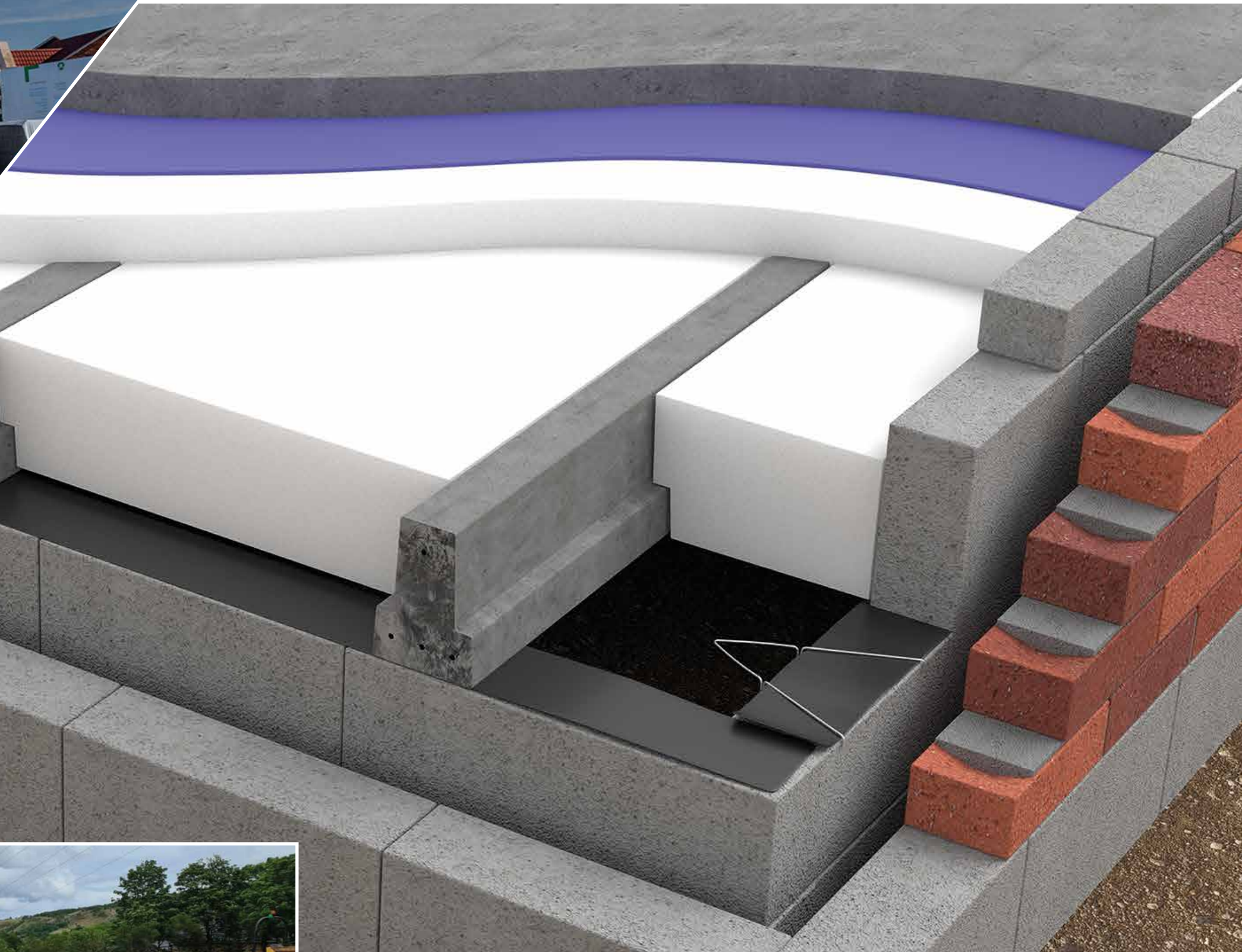
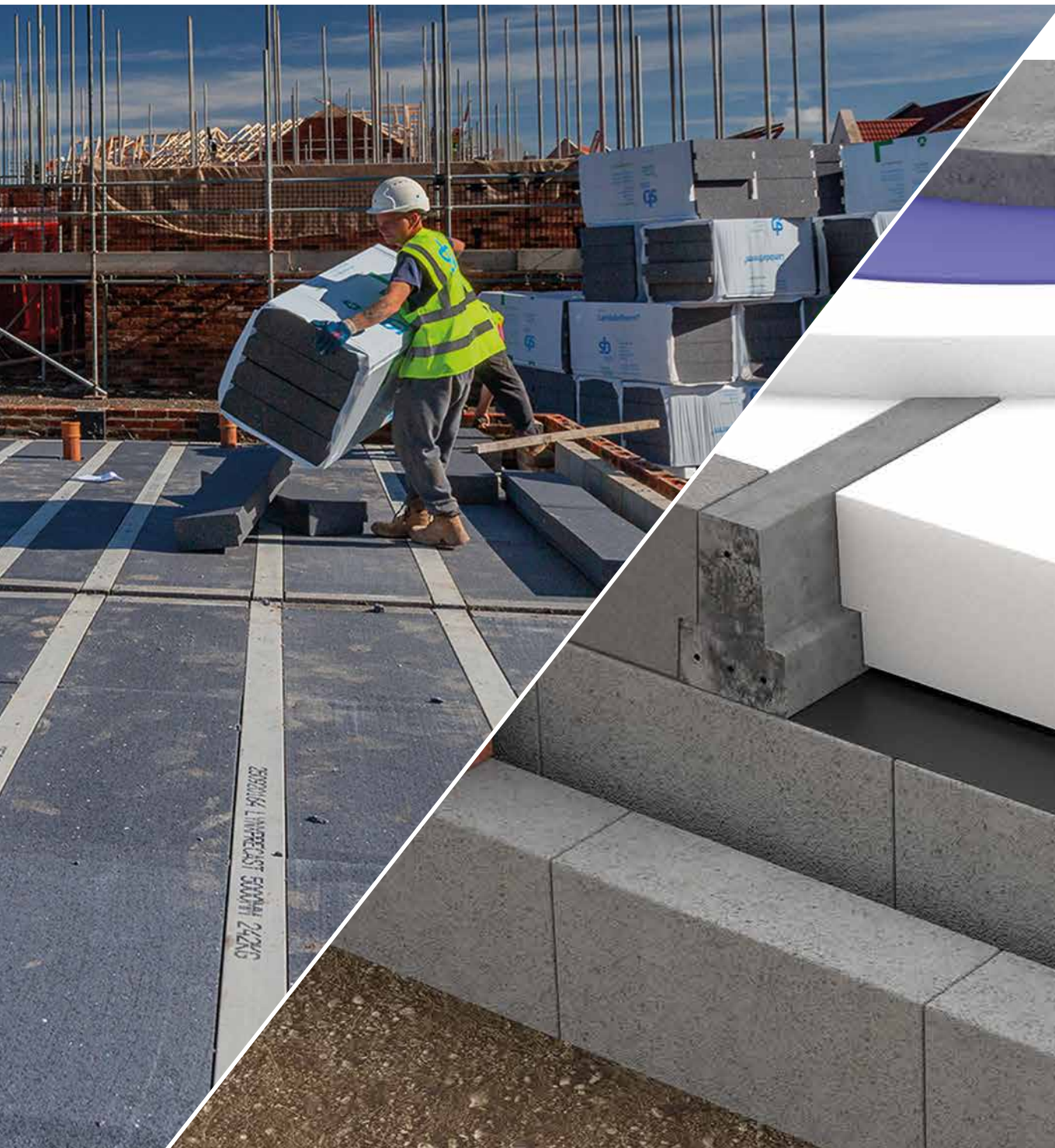
Dead Load (kN/m²)	
1.57 (75mm Lightweight Screed & Finishes) + 0.04 (75mm Insulation)	2.40 (100mm Conc)
Partition Allowance (kN/m²)	
0.50	1.00
Garage 9kN (point)	

Imposed Load (kN/m²)							
Configuration	1.50	2.00	3.00	4.00	5.00	7.50	2.50
S528	6.542	6.047	5.649	5.319	4.817	3.780	5.924
S416	7.233	6.707	6.280	5.924	5.622	4.740	6.575
S303	8.000	7.637	7.177	6.791	6.460	5.805	7.276



Typical sections





WARMFLOOR

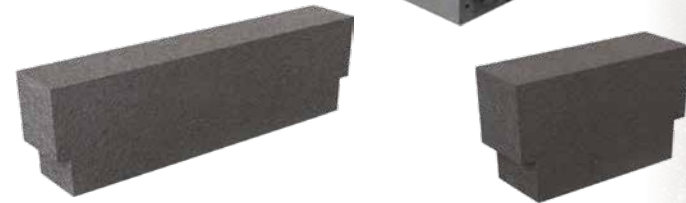


Warmfloor Insulated Flooring

Insulated Warmfloor, utilises 150mm or 225mm deep prestressed concrete beams in conjunction with highly insulating high strength expanded polystyrene blocks and components. A nominal 75mm structural concrete topping completes the flooring system. The resulting floor is a thermally efficient and cost effective solution. U values below 0.10w/m²K can be achieved by increasing the thickness of the EPS in the floor construction.

EPS is an environmentally friendly sustainable product with an ODP of zero, A+ BRE Green Guide rating and 100% and is recyclable with the efficient use of natural resources, for every 1 kilogram of oil used in the manufacture of EPS, 150 kilograms can be saved in heating oil over a fifty year period.

1 Prestressed beam
150mm or 225mm



4 Lightweight Concrete
Closure Block 540mm

Lightweight Concrete
Closure Block 340mm



2 EPS Starter / End
Block 300mm

3 EPS Infill
Block 340mm



3 EPS Infill
Block 540mm



6 EPS Structural
Grade Oversheet
2400mm x 1200mm

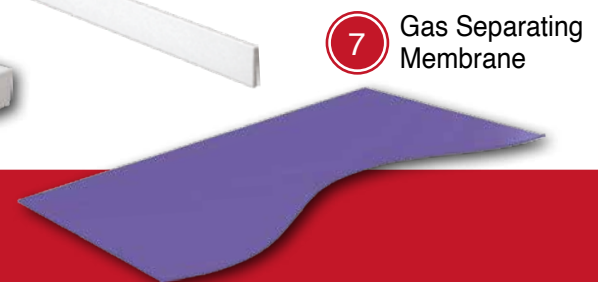


5 EPS Perimeter
Edge Strips
30mm x 75mm x 1200mm



Warmfloor clip

Damp proof
membrane



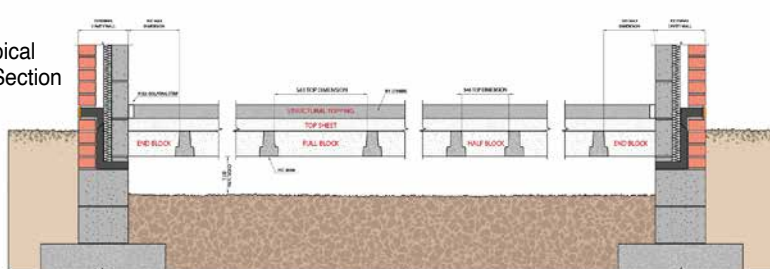
7 Gas Separating
Membrane



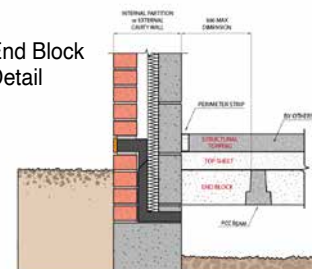
Air brick
/ Vent

Typical sections

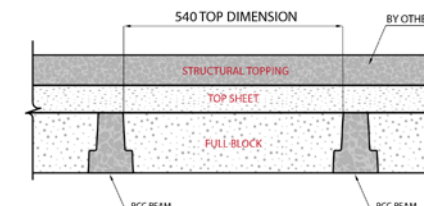
Full Typical
Cross Section



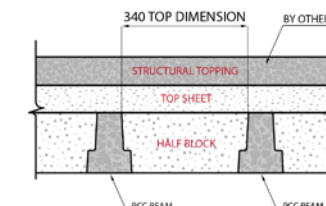
End Block
Detail



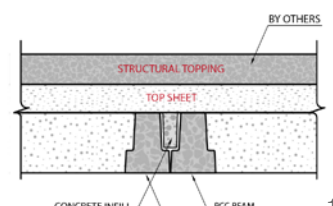
Full Block Detail



Half Block Detail



Double Beam Detail



Insulated Flooring Systems

Prestressed Concrete T beams manufactured in 150mm or 225mm depths in 50mm increments with high strength expanded polystyrene insulation blocks.

Insulated Flooring products are manufactured from environmentally friendly expanded polystyrene. EPS is a very sustainable product and an efficient use of natural resources, for every 1 kilogram of oil used in the manufacture of EPS, 150 kilograms can be saved in heating oil over a fifty year period.

U-Values

Warmfloor will help to enhance the thermal performance and efficiency of a building and can achieve ‘U’ values as low as 0.10 The “U” value is a measure of how easy it is for heat to pass through the fabric of a building measured in W/m²K, that is heat (watts) passing through each square metre (m²) for each 1°C of temperature difference. Warmfloor can be specified with a range of “U” values that will ensure the building meets its thermal efficiency target. The table gives the U values based on Perimeter/Area (P/A) using either standard white EPS or grey EPS. Grey EPS has added graphite which improves its insulating properties. The thermal performance of the floor can be improved by simply increasing the thickness of the topsheet.

U-Values

Topsheet Depth	75mm		150mm	
	White	Grey	White	Grey
P/A				
0.3	0.17	0.15	0.12	0.11
0.4	0.18	0.16	0.13	0.11
0.5	0.18	0.16	0.13	0.12
0.6	0.19	0.17	0.13	0.12
0.7	0.19	0.17	0.14	0.12
0.8	0.19	0.17	0.14	0.12

U-Value (w/m²K)

Approved Finishes

Concrete:

Standard Concrete: 65mm min depth (above services)	C28/35 with maximum aggregate size 20mm and reinforcement selected from the options below. Slump should be Class S3 (100 to 150mm) or S4 (for spot samples taken from initial discharge, 140 to 230mm). Aggregate to comply with BS EN12620: 2013.
Self Compacting Concrete: 65mm min depth (above services)	C28/35 with maximum aggregate size 10mm and reinforcement selected from the options below. Slump flow class should be SF1 (550 to 650mm) or SF2 (660 to 750mm). The sand content should be greater than 45%. Aggregate to comply with BS EN1260:2013.

Reinforcement:

Steel Mesh	One layer of A142 mesh (to BS 4483:2005) with a characteristic yield strength of 500N/mm² set at mid-point to the depth of the concrete topping.
Steel Fibres	Novomesh B&BA: Dosage rate 17.5kg/m³, steel flat end, steel fires, 50mm long, 1mm diameter, tensile strength of 1150N/mm².
Steel Fibres	Adfil SF86: Dosage rate 7.5kg/m³, 60mm long, 0.75mm diameter, modulus of elasticity of 200000N/mm², tensile strength of 1225N/mm².
Steel Fibres	Zenith 60: Dosage rate 10kg/m³, 60mm long, 1mm diameter, modulus of elasticity of 200000N/mm², tensile strength 1500N/mm².
Steel Fibres	Sikafiber-1050 B&BA HF: Dosage rate 11.5kg/m³, 50mm long, 0.75mm diameter, tensile strength 700N/mm².
Macro-Polymer	Novomesh B&BA: Dosage rate 3.84kg/m³, continuously deformed, 60mm long, 0.56mm diameter, modulus of elasticity of 7000N/mm², tensile strength 600N/mm².
Macro-Polymer	Durus Easy Finish: Dosage rate 2.5kg/m³, 40mm long, 0.7mm diameter (equivalent), modulus of elasticity of 6000N/mm², tensile strength of 470N/mm².
Macro-Polymer	Nexus 85: Dosage rate 2.5kg/m³, 60mm long, 0.7mm diameter, modulus of elasticity of 5000N/mm², tensile strength 375N/mm².



Warmfloor Load Span tables


CS120

WarmFloor Load Span Tables (m)

CS120

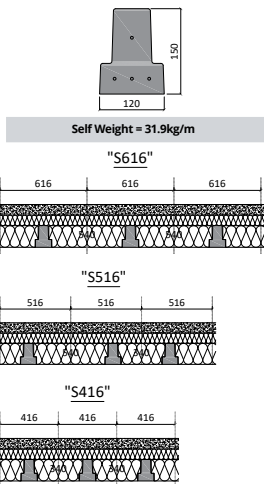
WarmFloor

Load Span Tables (m)



Dead Load (kN/m²)	
1.80 (75mm Concrete topping)	
Partition Allowance (kN/m²)	
0.50	1.00

	Imposed Load (kN/m²)					
Configuration	1.50	2.00	3.00	4.00	5.00	7.50
S616	4.305	3.875	3.520	3.005	2.615	1.970
S516	4.655	4.200	3.835	3545	3.105	2.350
S416	5.105	4.630	4.235	3.920	3.670	2.900




CS160

WarmFloor Load Span Tables (m)

CS160

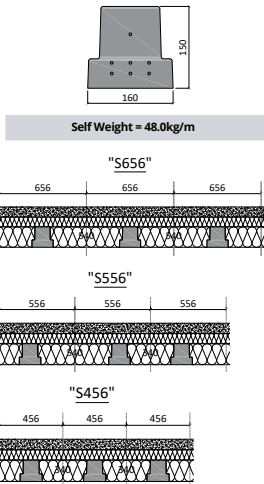
WarmFloor

Load Span Tables (m)



Dead Load (kN/m²)	
1.80 (75mm Concrete topping)	
Partition Allowance (kN/m²)	
0.50	1.00

	Imposed Load (kN/m²)					
Configuration	1.50	2.00	3.00	4.00	5.00	7.50
S656	5.195	4.700	4.325	5.025	3.780	3.145
S556	5.565	5.055	4.660	4.345	4.085	3.590
S456	6.035	5.500	5.080	4.745	4.470	3.940




CS225

WarmFloor Load Span Tables (m)

CS225

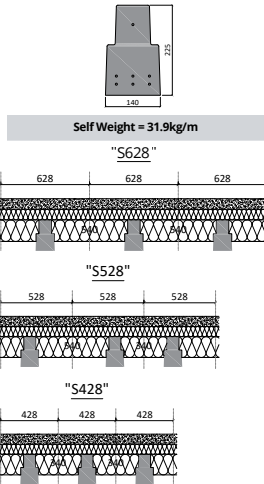
WarmFloor

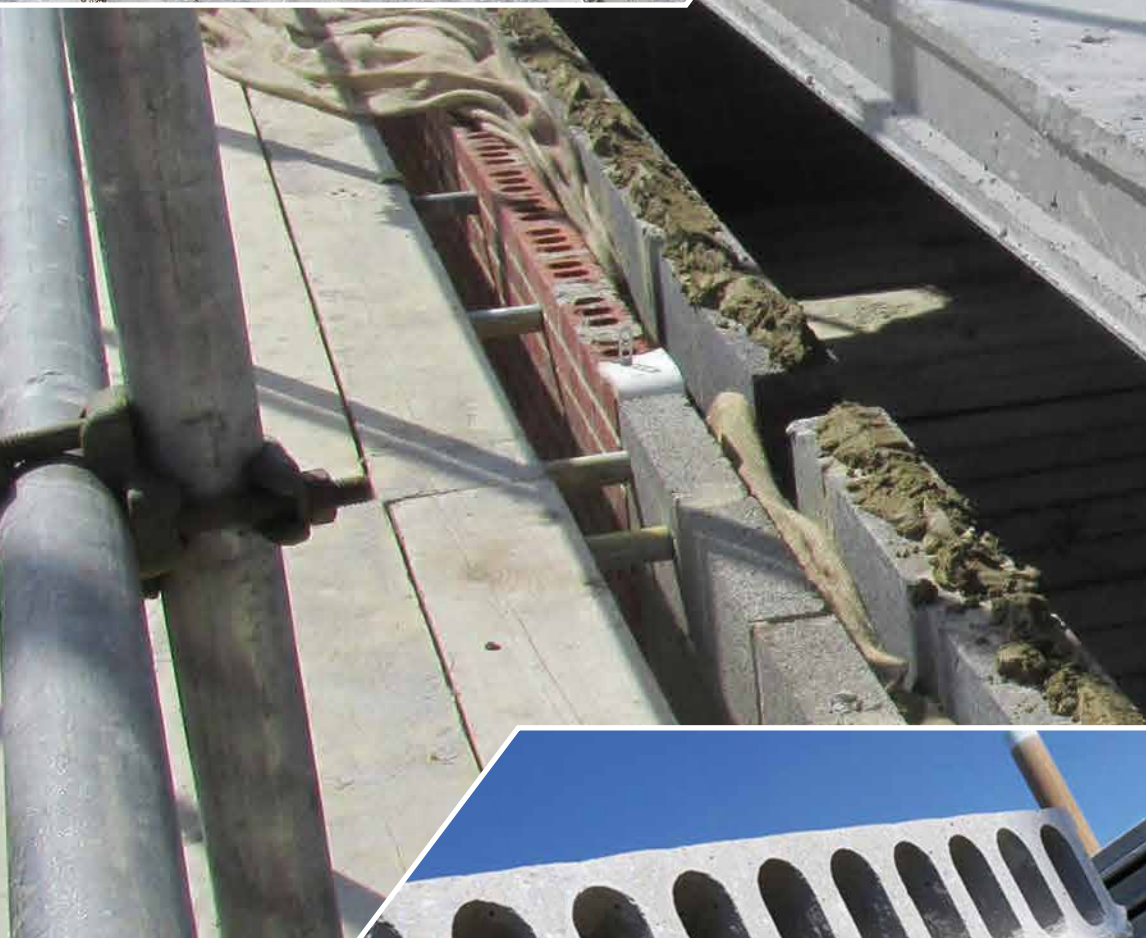
Load Span Tables (m)



Dead Load (kN/m²)	
1.80 (75mm Concrete topping)	
Partition Allowance (kN/m²)	
0.50	1.00

Configuration	Imposed Load (kN/m²)					
	1.50	2.00	3.00	4.00	5.00	7.50
S628	6.635	6.035	5.570	5.125	4.500	3.445
S528	7.105	6.485	6.005	5.610	5.270	4.055
S428	7.695	7.055	6.550	6.140	5.795	4.920





HOLLOWCORE

Hollowcore Flooring

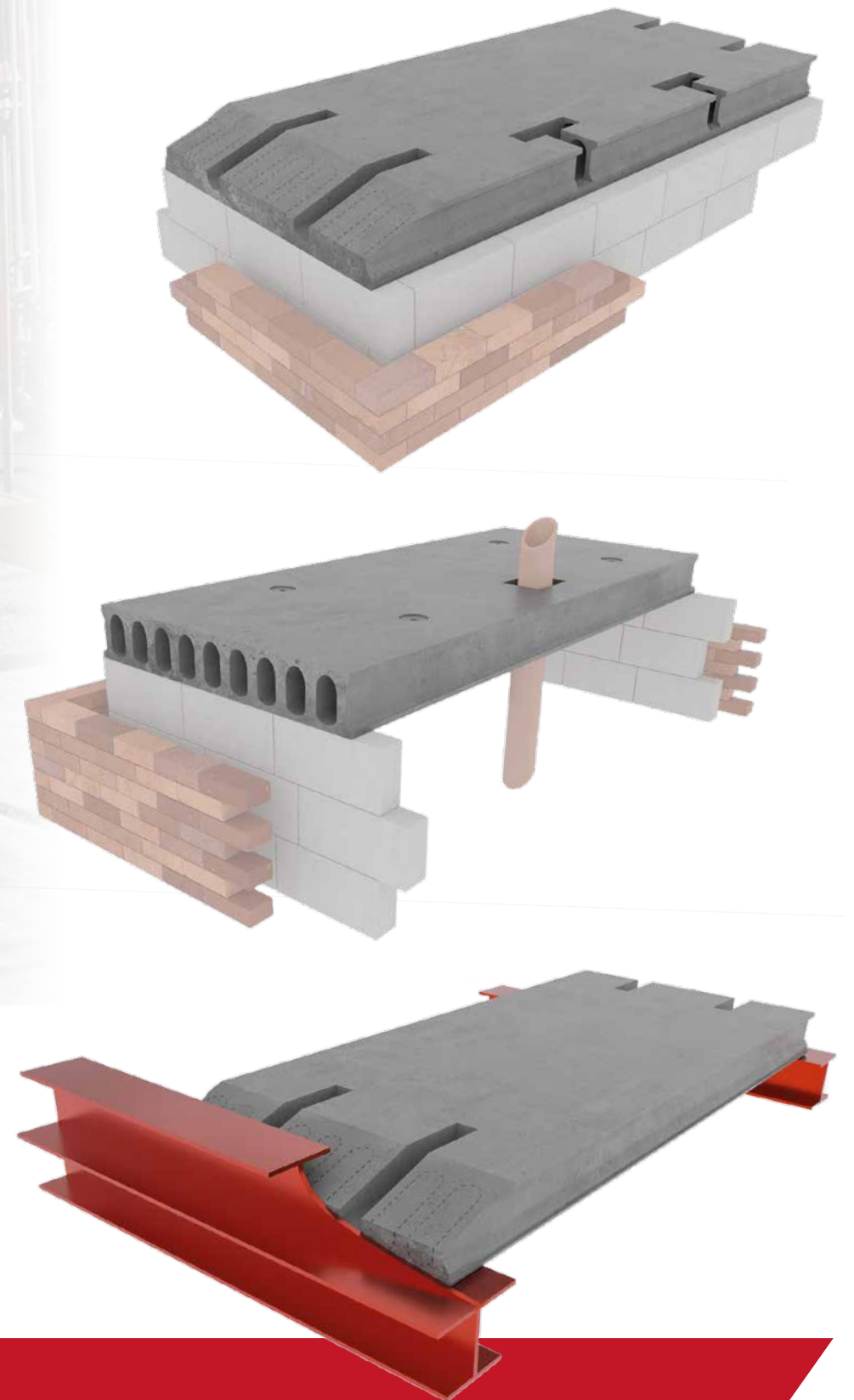
Hollowcore floors (also known as planks or slabs) are light, efficient, and strong. They are prestressed slabs with cast in circular voids, creating an efficient unit that is lightweight and has a high span to depth ratio.

Our Hollowcore concrete floor units offer high span capacity and can be supplied with factory formed holes, notches and open cores to satisfy various structural design requirements.

'Acoustic' slabs are manufactured to satisfy the requirements of Part E resistance to sound of the building regulations, and can therefore be used without the need to carry out pre-completion testing.

Available as 100mm, 150mm, 200mm and 250mm deep units and are produced as standard 1200mm wide.

Our flooring can be used on residential, commercial, educational, infrastructure and car parks. We offer competitive prices, quick and efficient installation and reduced site risks. Our experienced installation teams are available to install on your project.



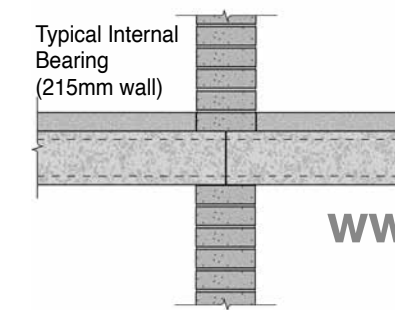
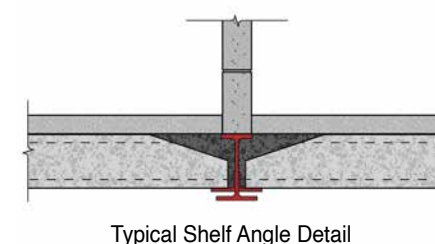
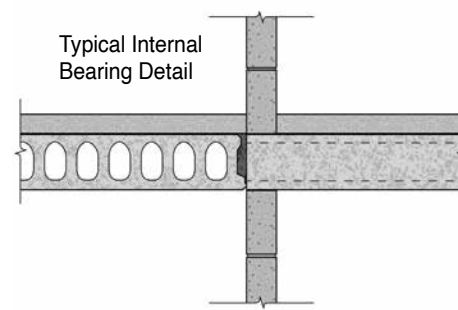
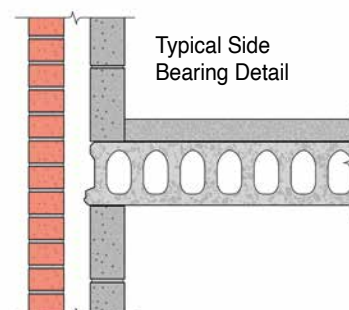
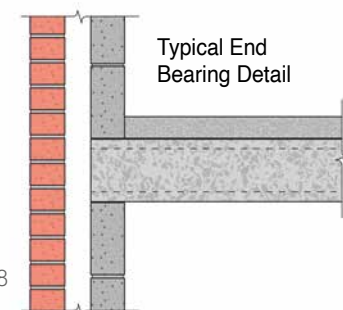
Benefits

- Factory Produced to high tolerance
- Fire resistance 1 or 2 hour
- Speed of erection
- Immediate working platform for following trades
- Preformed site services
- Disproportionate collapse detail easy to accommodate
- Acoustic units to satisfy Part E Building Regulations
- Composite design with Structural topping

Application

- Residential and Domestic
- Care homes
- Offices
- Retail
- Schools
- Student Accommodation
- Hotels & Leisure

Typical sections





LIFT SHAFTS



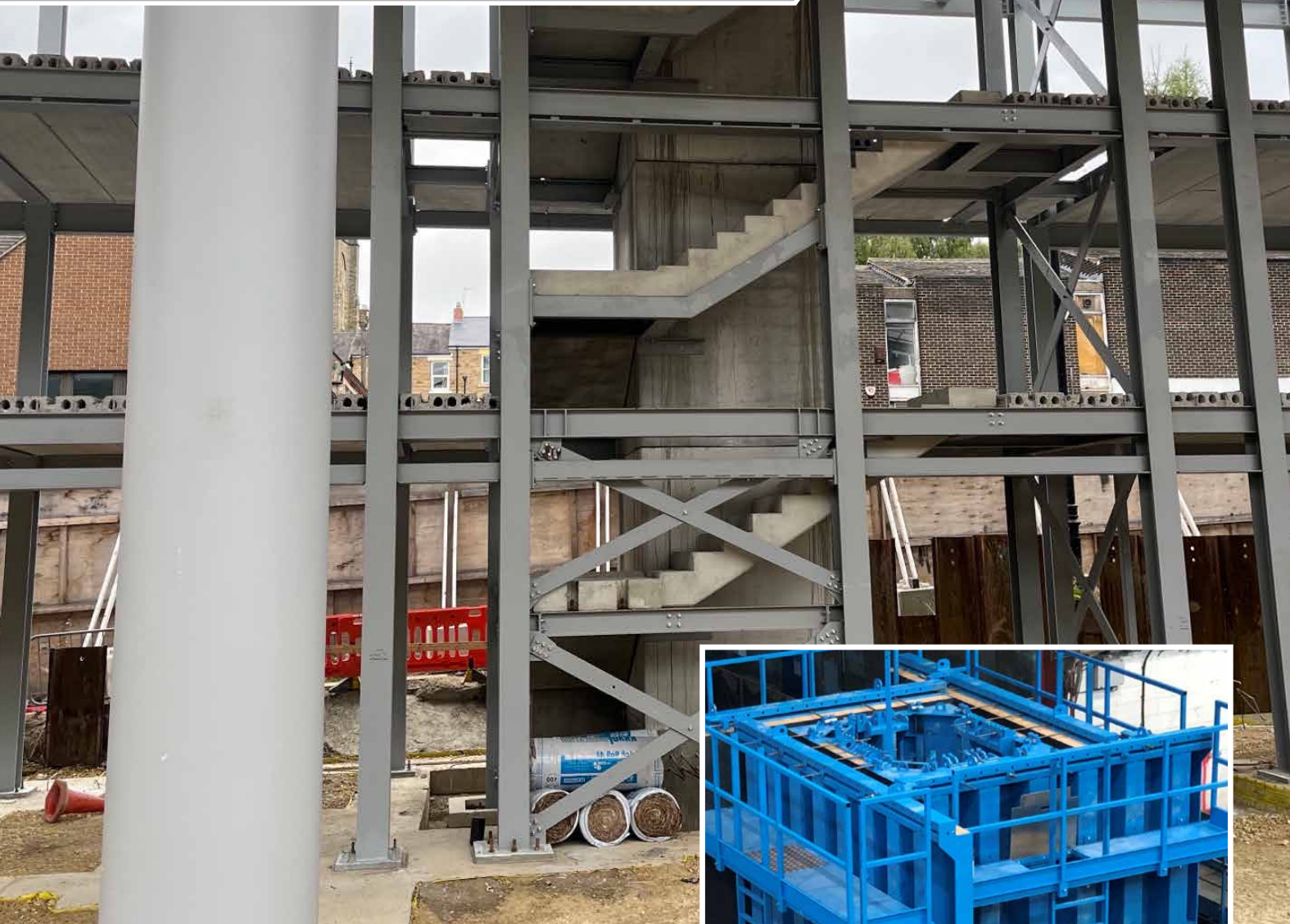
Lift Shafts

Standard liftshafts are designed to support loadings from lift cars and equipment during installation, operation and maintenance. Structural liftshafts can support loads imposed by the main structure of the building.

Liftpits can be manufactured using waterproof concrete mixes or coated in finishes that prevent the ingress of water.

Liftcaps can incorporate lifting accessories to suit lift car manufacturers requirements or lifting beams.

Inner core walls can be painted to aid with mechanical installation.



Size and Configuration

Our liftshafts are manufactured in adjustable modular steel moulds with internal core sizes from 1200mm x 1200mm to 3400mm x 7800mm in 50mm increments.

Wall thicknesses from 125mm to 225mm.

Single, Twin or Triple cell configuration.



STAIRS AND LANDINGS



Stairs and Landings

Precast Stairs and Landings compliment our suite of precast flooring solutions. Precast stairs eliminate the need for expensive formwork and temporary propping on site.

They are manufactured in adjustable steel moulds in a factory environment ensuring the highest quality and dimensional accuracy with a Type A finish as per BS8110.

Our experienced team can design, manufacture and install complex bespoke units which includes curved flights and units with mid landings and head and toe landings.

All precast concrete stairs and landings have cast in lifting pins for ease of installation. Precast stairs can be installed with our precast floors in the same visit.



Application

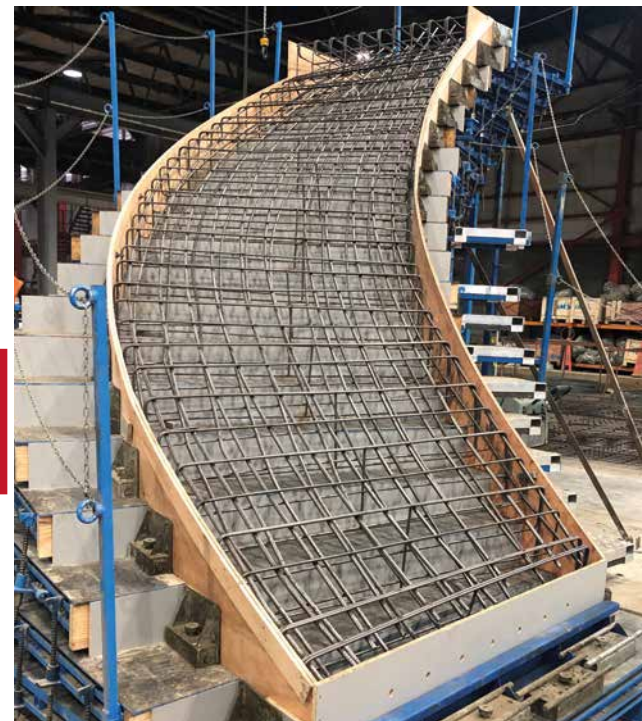
- Residential and Domestic
- Care homes
- Offices
- Retail
- Schools
- Student Accommodation
- Hotels & Leisure
- Hospitals

Benefits

- Bespoke Design and detailing of precast concrete stairs and landings
- Quick and easy installation
- 1 hour fire resistance
- Safe Access to upper floors

Manufactured in fully adjustable steel moulds in any configuration including straight flights or with integral mid, top and bottom landings or continuous curved helical stairs.

All stairs can be produced to accommodate fixing of handrails before installation allowing immediate safe access to upper floors.

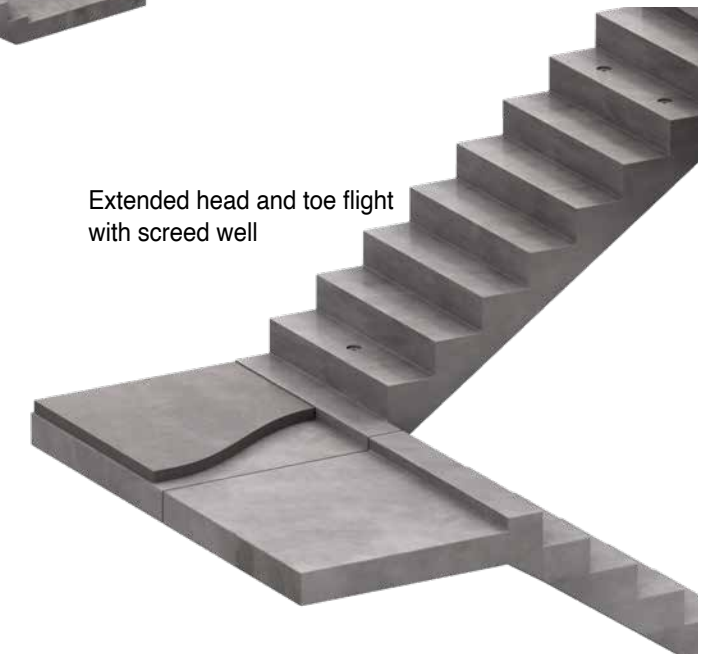


Stairwell showing bearing onto steel and precast or insitu landing

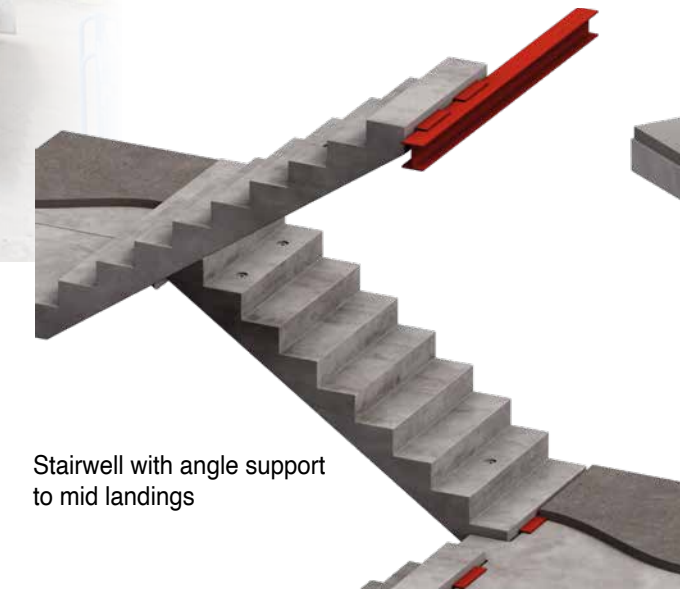


Progressive collapse tying detail

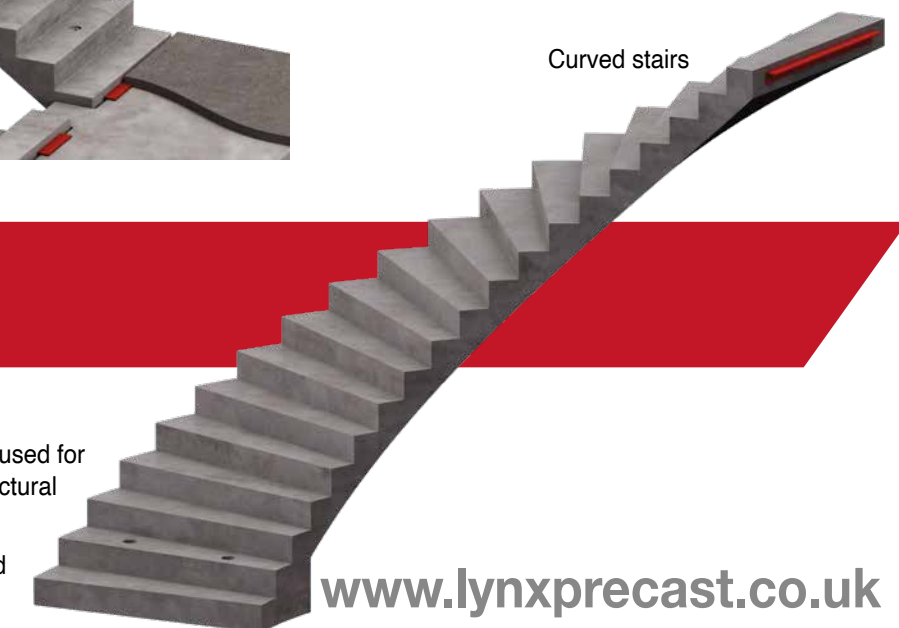
Extended head and toe flight with screed well



Stairwell with angle support to mid landings



Curved stairs



Typical details

All stair drawings are generated using the latest software which can be imported into 3D models used for clash detection and to check support detail. Structural calculations are provided on request.

Standard and curved stairs can be manufactured up to 2m wide with up to 22 riser.

www.lynxprecast.co.uk

How we work

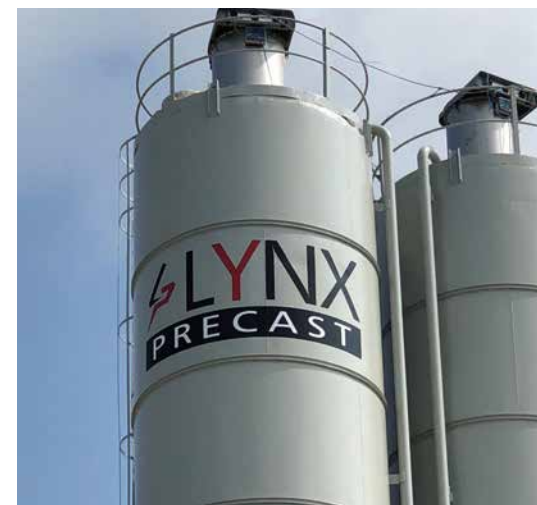
Health and safety

Lynx Precast are committed to ensure that its operations do not adversely affect the health, safety and welfare of its employees, contractors, visitors or members of public by:

- Allocating sufficient resources and support to implement the policy.
- Identifying, planning for, and controlling the risks associated with our activities.
- Providing adequate supervision, education and training resulting in highly motivated and competent employees.
- Monitoring the implementation and effectiveness of the policy at regular intervals.

We aspire to set the highest health and safety standards to promote the confidence and trust of our employees, suppliers and customers. Lynx Precast are committed to ensure that its operations do not adversely affect the health, safety and welfare of its employees, contractors, visitors or members of public by:

- Allocating sufficient resources and support to implement the policy.
- Identifying, planning for, and controlling the risks associated with our activities.
- Providing adequate supervision, education and training resulting in highly motivated and competent employees.
- Monitoring the implementation and effectiveness of the policy at regular intervals.



Quality

Lynx Precast has built a reputation for producing consistent, high quality products off site in factory-controlled conditions. Our products and processes comply with all relevant standards and our quality management system is accredited to BS EN ISO 9001.

All products are clearly printed with project details, unit information, manufacturing date, dimensions and weight ensuring full traceability and quick reference in the event of any query.

Factory production control accreditation requires us to rigorously check dimensions and physical properties of our products. Once installed, you can be confident that they will be fit for purpose and meet the specification.

Sustainability and Environment

We are committed to sustainable development as a guiding principle within our work. Concern for the environment is a fundamental prerequisite and we aim to reduce the impact of our operations on the environment by:

- Promoting responsibility for the environment throughout the organisation at all levels.
- Complying with all relevant legislation and regulations. Our environmental management system is accredited to ISO 14001.
- Reducing the use of energy, water and other resources.
- Minimising waste and increase the use of recycling.
- Using cement replacements and reducing embedded carbon in our products.
- Continual investment in the most up to date and technologically equipment available.
- Organising product deliveries and promoting the most economic use of delivery vehicles.
- Providing adequate resources and capital investment to enable commitment to this policy.

Some examples of our ongoing progress are detailed below.

- After investment exceeding £600K in the last 12 months more than 50% of our forklift fleet are fully electric zero emission.
- No waste products leave site until they are fully recycled into crushed concrete and steel. A proportion of the crushed concrete aggregates are reused in fresh concrete mixes.
- All uncured concrete is fully processed by a concrete recycling plant, the reclaimed aggregates and water are reused in fresh concrete mixes. Over 20% of our water usage is reclaimed.
- Every light on site including offices and yard has been converted to energy efficient LED units.



Ashington

Sales Office / Production
Lynefield Park, Ashington
Northumberland
NE63 9YH

Tel: **0191 244 9339**

Fax: **0191 244 9338**

Wakefield

Sales
4 Mariner Court
Calder Business Park
Wakefield, West Yorkshire
WF4 3FL

Tel: **01924 253314**

Fax: **01924 253694**

