## Aesthetic & Thermally Efficient Precast **Concrete High-Rise Residential Construction** Seamus McKeague – CEO Creagh Concrete



CREAGH INNOVATION IN CONCRETE











## **CREAGH CONCRETE**

### Operating across the UK and Ireland.















## 

Established in 1976, Creagh Concrete has grown to become one of the largest and most innovative producers of concrete products for a diverse range of market sectors throughout Ireland and the UK.

















## Medium / Highrise Accommodation

## **Creagh's Core Market**

## Education





## Carparks

## Agricultural

## Housebuilding



Retail

INNOVATION IN CONCRETE



















## **OUR WORLD TODAY**

## **Climate Change**

Scarcity of building materials & labour

## **5G / Digital** Transformation

## MMC & DFMA





## **Global Pandemic**

Vast increase in commodity costs

## **Construction Residential Demand**

## BREXIT

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## How Creagh adapted to Global & Industry Changes

## Manufacturer

Designer

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Provide a holistic package & Widening our offering

## Engineer = Confidence in

## making it happen

## Installation & Builder

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## Long Term Value High Quality **Building Longevity**















Seized the opportunity Typical job size 200-400 Apartments Strong Order Book £200m Sales Funnel

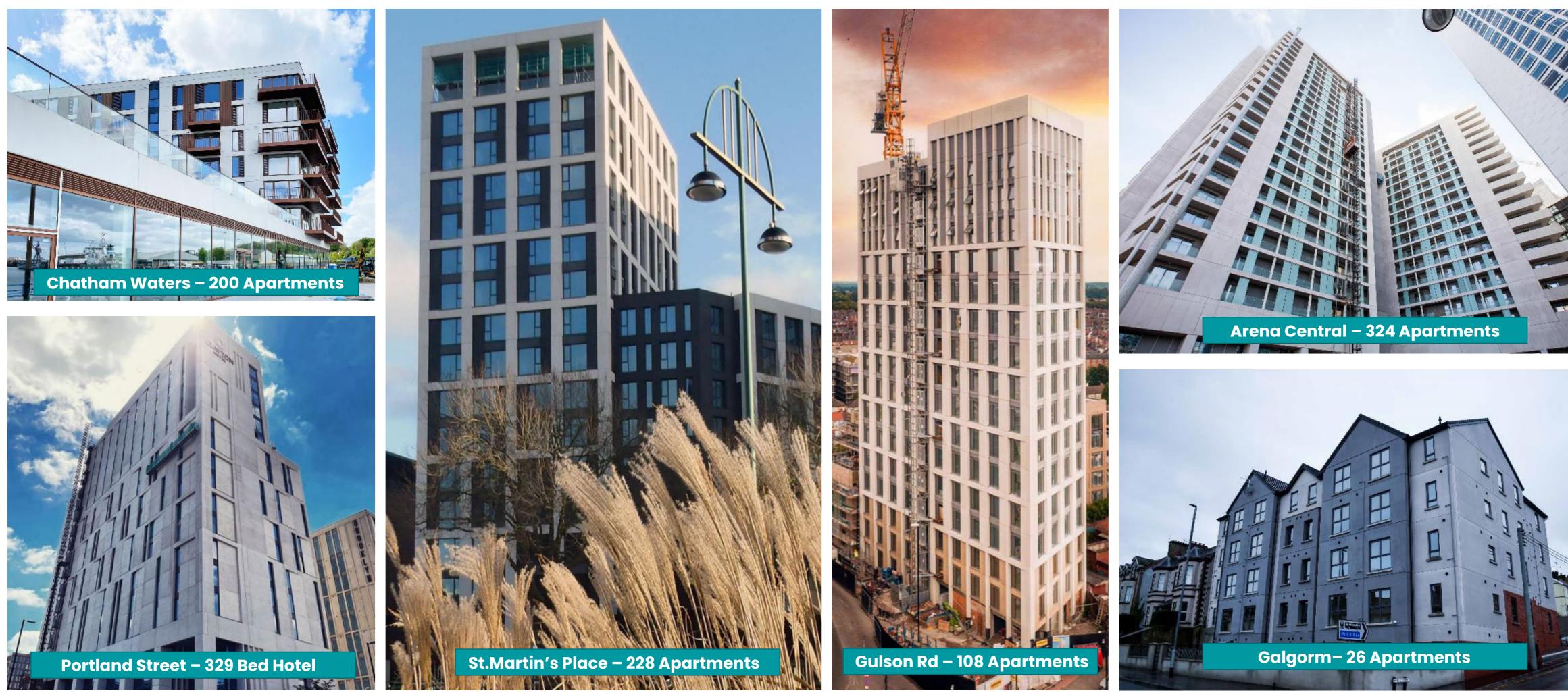




## Excess of £1b schemes quoted in the last 3 years



## **Jobs Completed in last 5 Years**







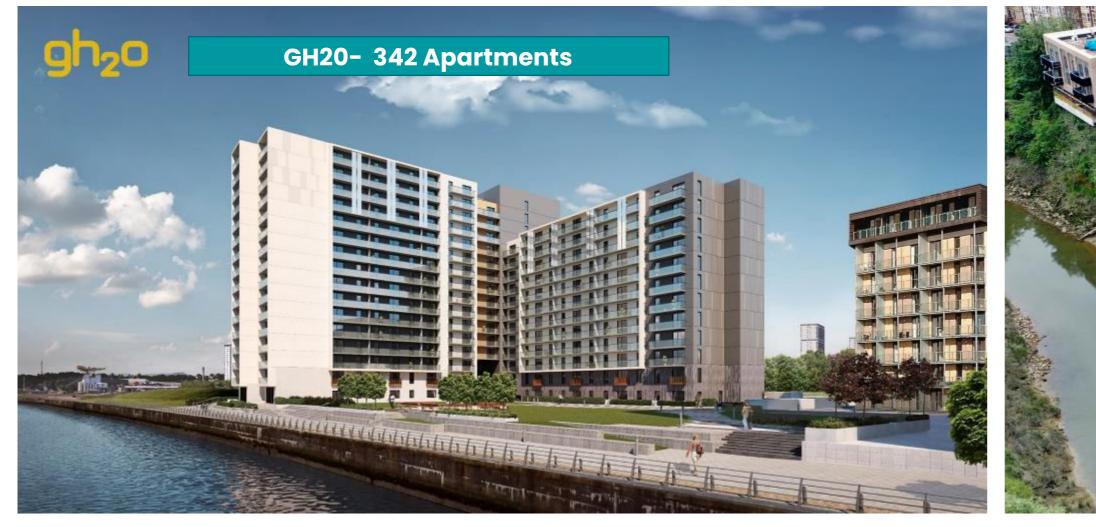








## **Jobs Currently Onsite**







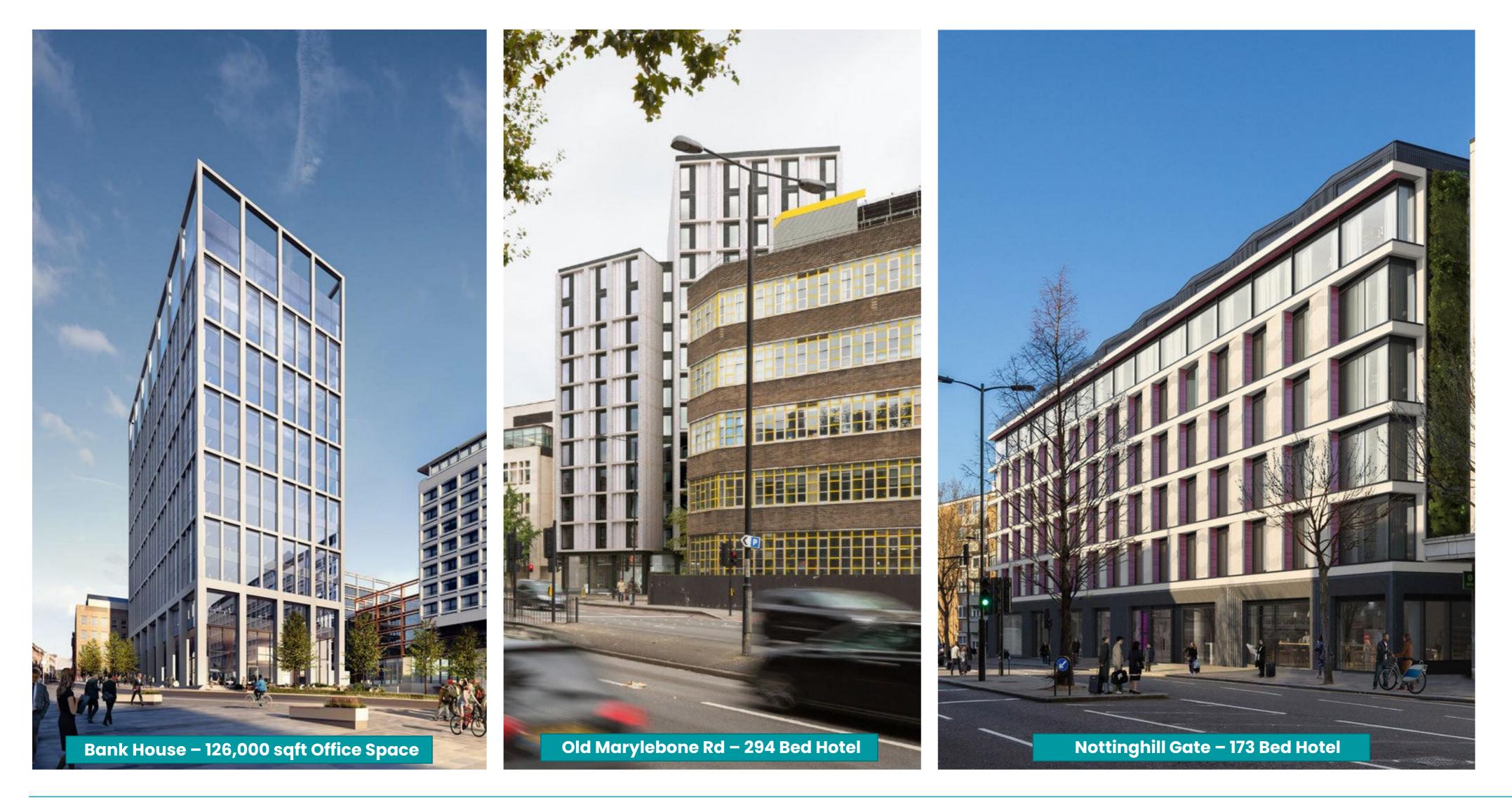
#### **CREAGH**







## **Jobs Due Onsite Soon**









## **Market Share**



## Market Demand

300,000 Units 20% 60,000 Med-High Rise 25% 15,000 Precast Apartments €50,000 / Apartment = €750m









## **CREAGH Target Market Share 15%**

2,250 Med-High Rise Apts €112,500,000



#### Cost & **Programme Certainty**

#### **Enhanced Safety & Quality**

#### **Commerically viable**

Aesthetically pleasing

#### **CREAGH**

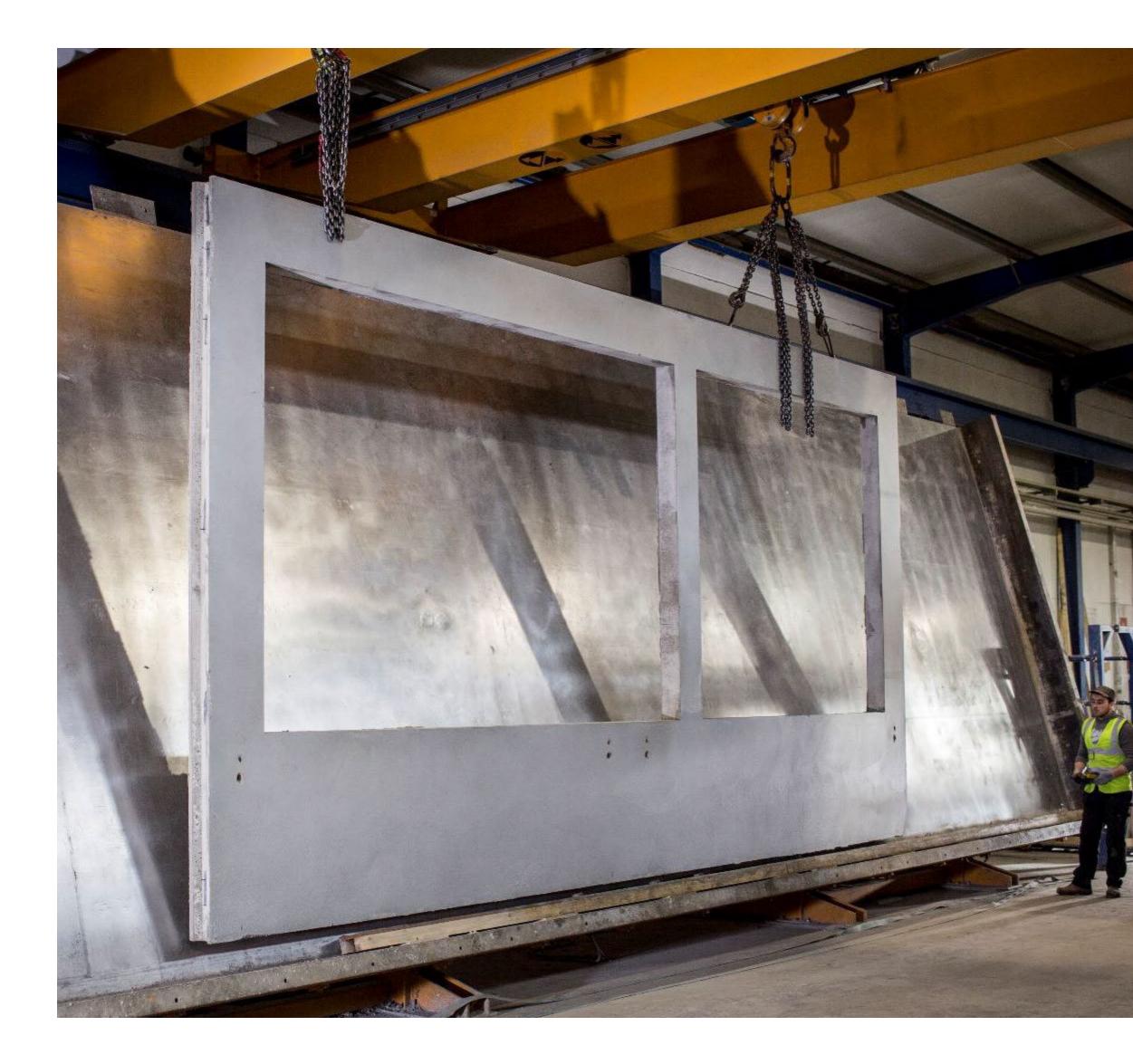


Acoustically and Structurally Sound

## Creagh MMC & Offsite **Products & Service** Offer









## **Production** Continuity of manufacturing:

Lean Production Cost Effective Efficient Higher Quality

"Better People, Better Quality, Better Industry"



## **PRECAST INDUSTRY CHANGES OVER LAST 20 YEARS**

**Uncertain market growth** 

**Precast industry lacks profitability** 

Automation / Digital / Products

Changing ownership / other forms of construction

Lifestyle changes and needs

Lack of apprentices and new skills









## **CONSTRUCTION INDUSTRY TODAY**

### Supply of trades diminishing

More clients and investors bringing equity funding

Building, thermal, acoustic, regulations; sustainability & environmental concerns





### **Modern methods of** construction (MMC)

### Cost and program certainty; consistent high quality



## **ADDING VALUE**

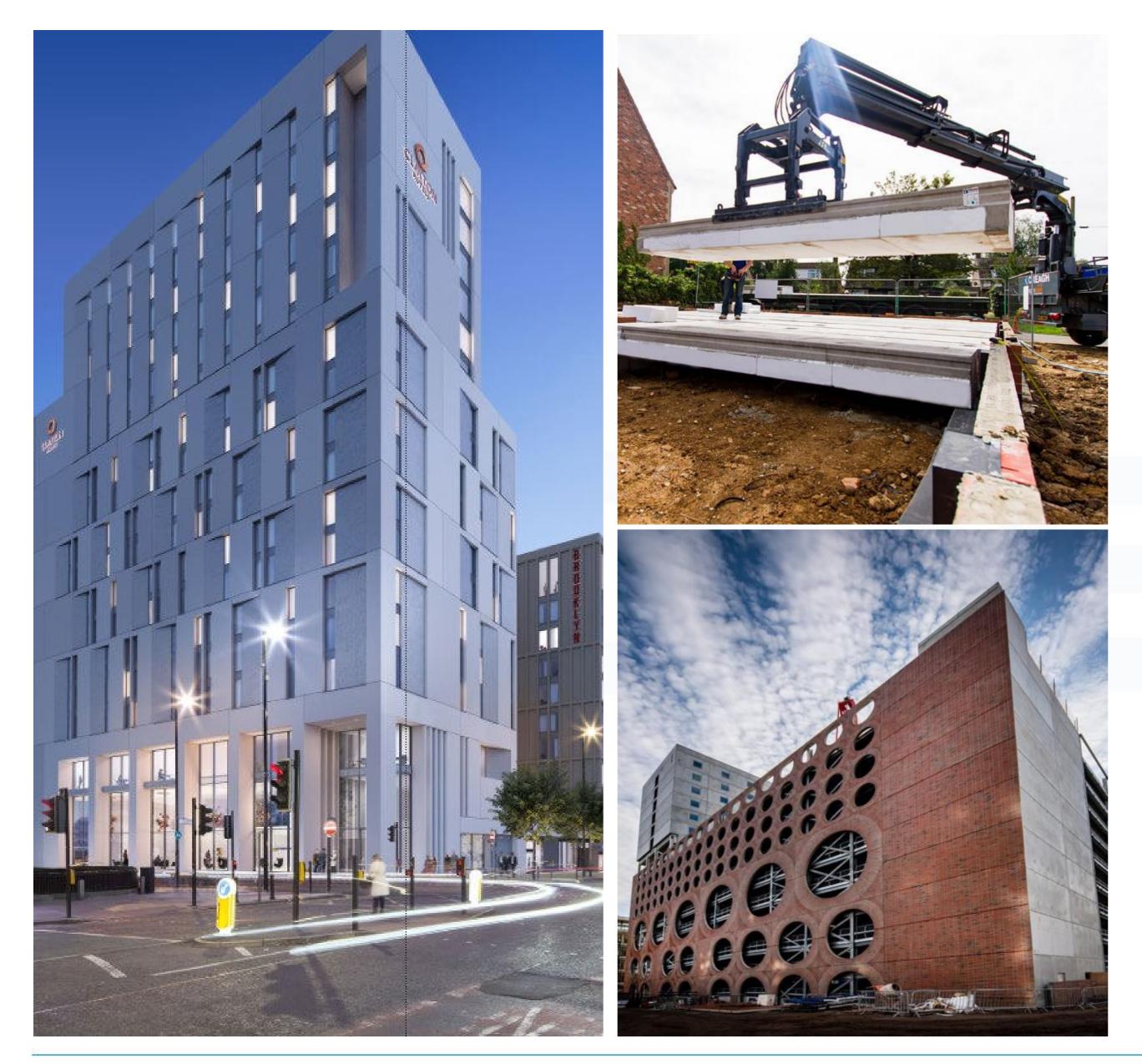
- Design, Engineer, Manufacturer, Logistics, Contracts, Installation
- Holistic approach in overall projects
- Façades
  - Finished Wall Panels

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**Capid Ces** Fastrack Build System

## rapid cores









## Growing our business requires a holistic mindset

Holistic service; design, logistics, manufacturing & build onsite

## Early Involvement in design process

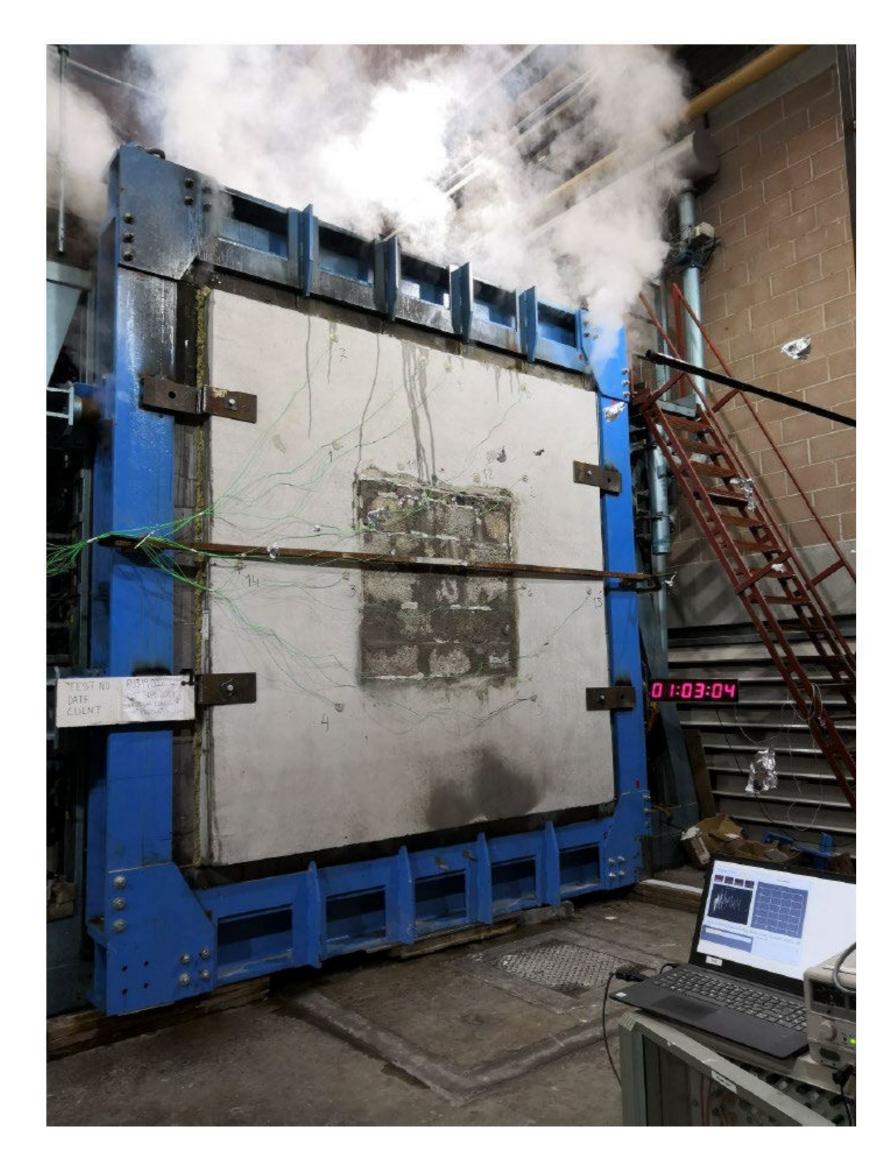




## Interfacing with other trades, M&E, architects & consultants







## **FIRE SAFETY**





- Creagh manufacture precast wall panels use
- components that comply with the most
- demanding European fire classification rating
- of A1- the highest rating available, meaning
- 'no contribution to fire growth' in accordance
- with BS EN 13501:2018,
- BS 476-20: 1987 & BS 476-21: 1987.



## **EXAMPLE U-VALUES**

Option 1		Option 2		
Depth (mm)	Component	Depth (mm)	Component	
160	Concrete	160	Concrete	
200	Rockwall Insulation	130	Rockwall Insulation	
80	Concrete	80	Concrete	
15	Brick Slip	15	Brick Slip	
Total Depth	455mm	Total Depth	385mm	
Overall U Value	0.180 W/m²K	Overall U Value	0.270 W/m <sup>2</sup> K	

Option 3		Option 4	
Depth (mm)	Component	Depth (mm)	Component
160	Concrete	160	Concrete
200	Rockwall Insulation	185	Rockwall Insulation
80	Concrete	80	Concrete
Total Depth	440mm	15	Brick Slip
Overall U Value	0.180 W/m <sup>2</sup> K	Total Depth	440mm
		Overall U Value	0.190 W/m <sup>2</sup> K



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## Elliott's Yard – Gulson Road COVENTRY







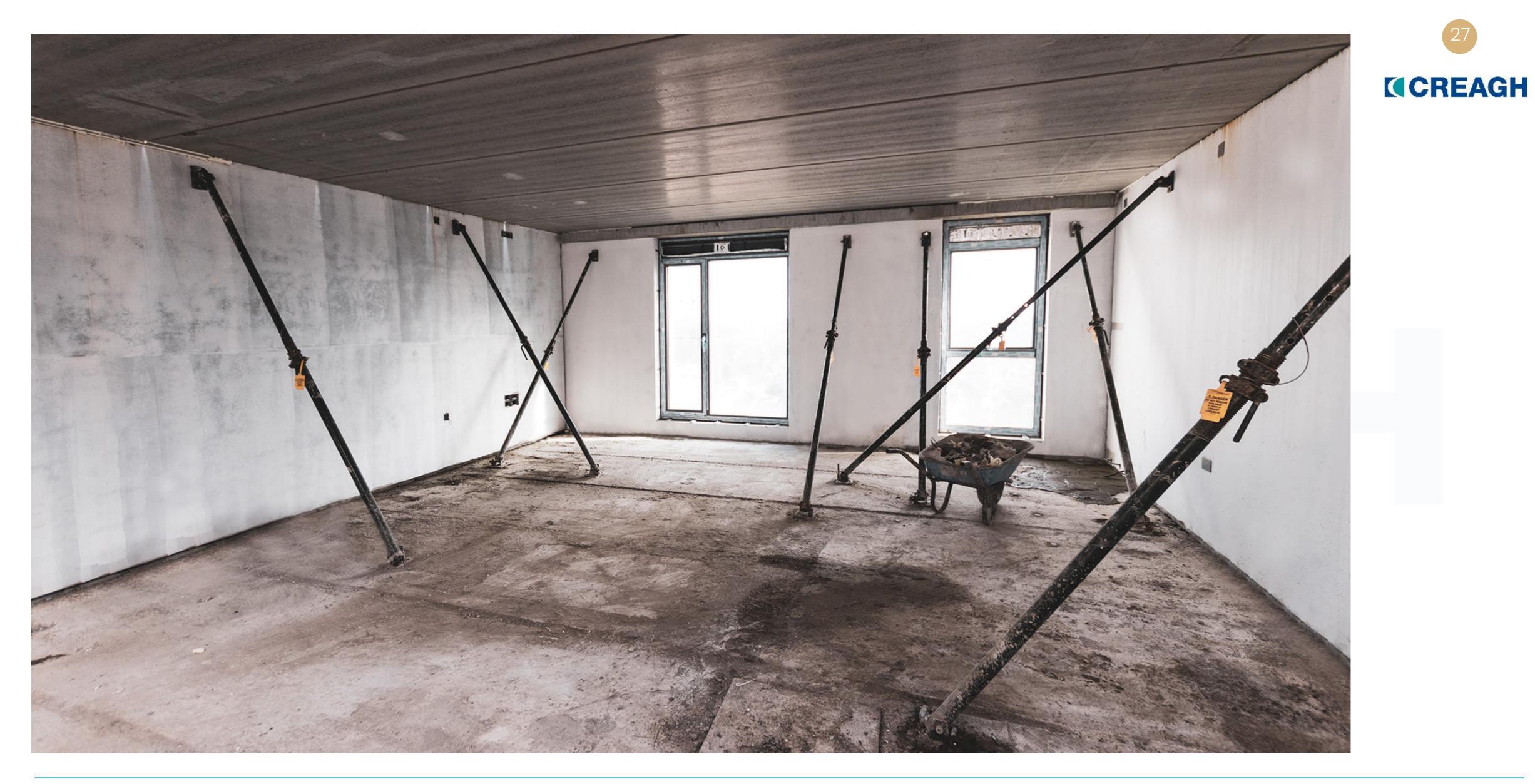










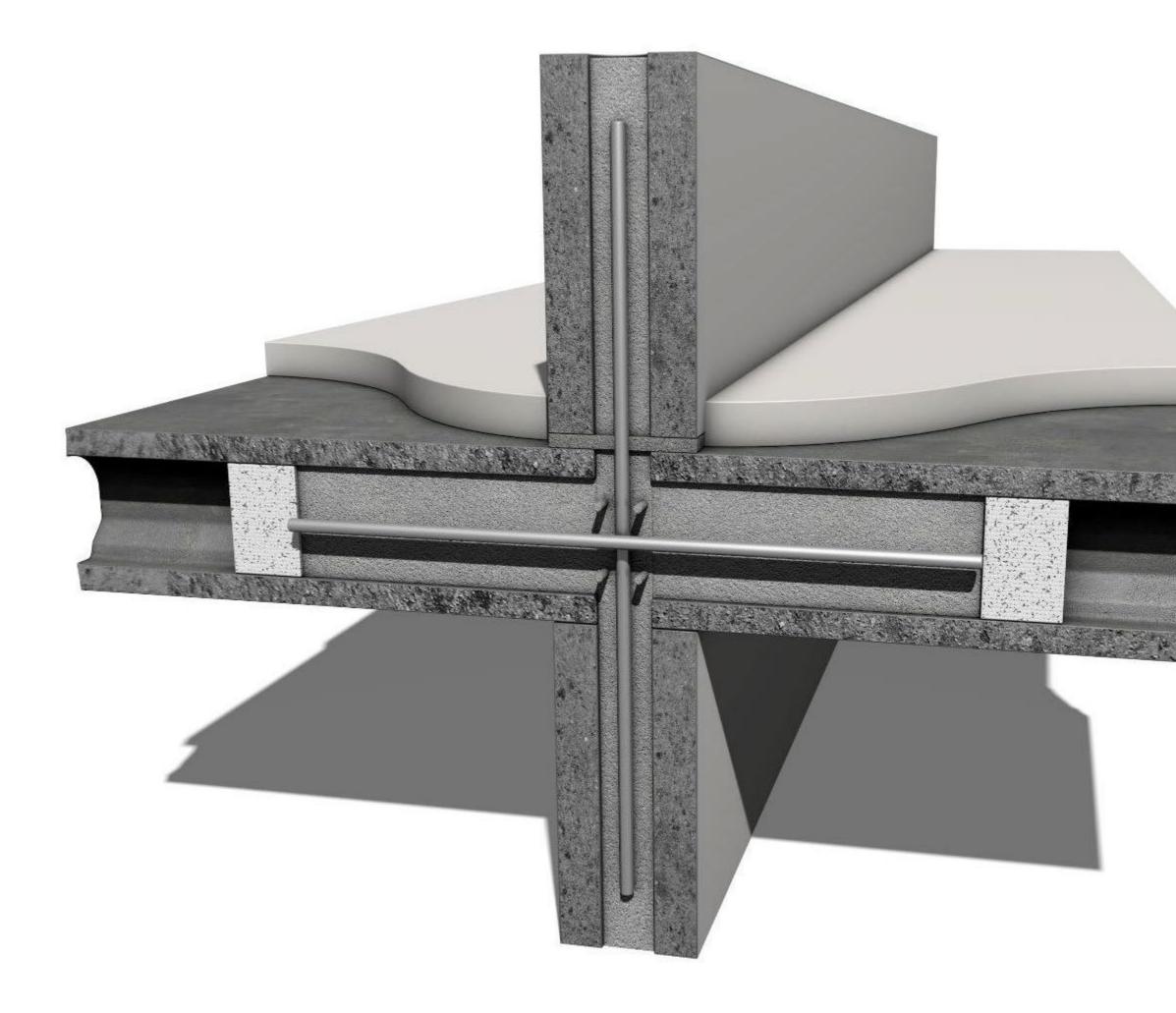












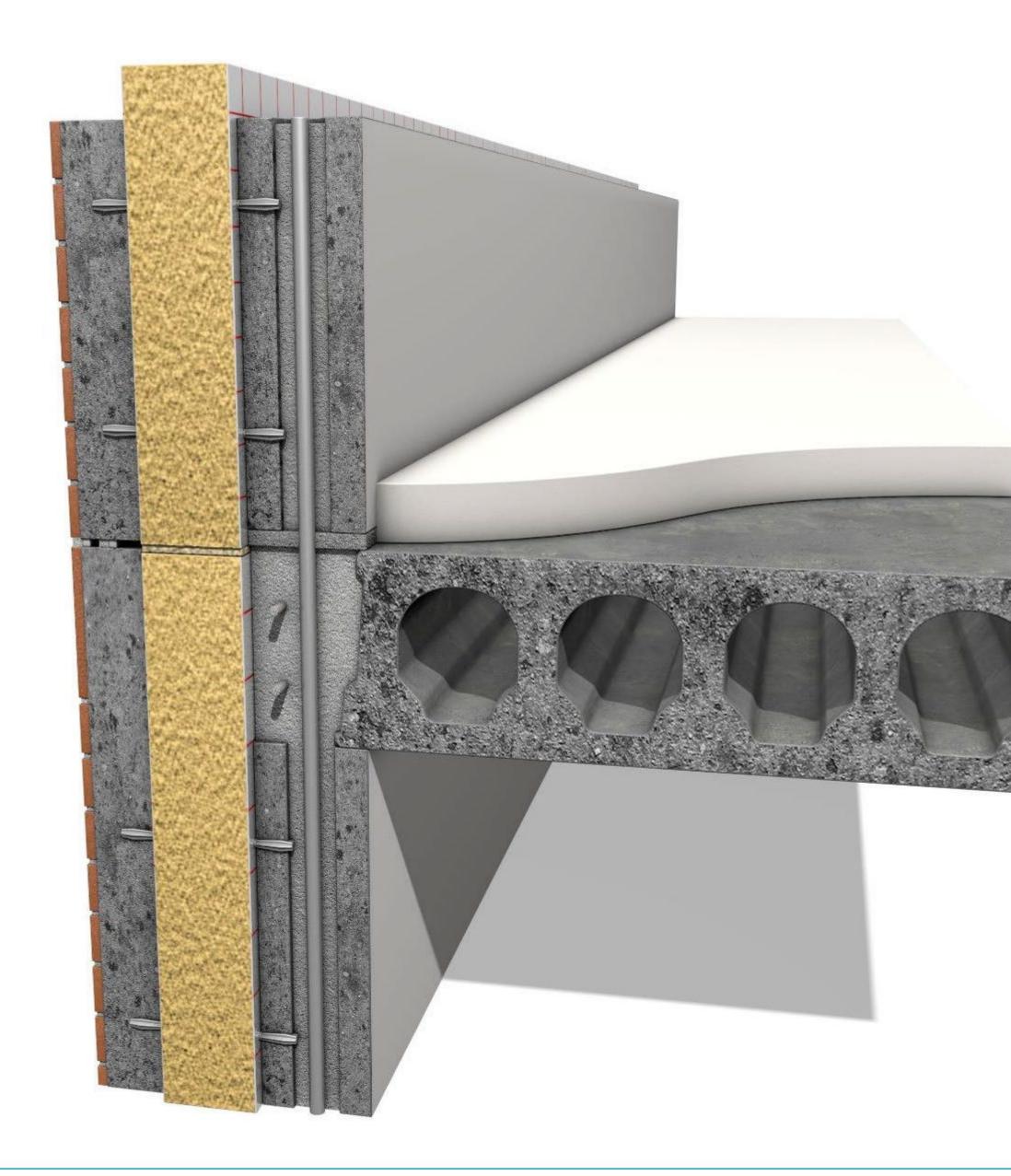




## Key Components in Rapidres®

**Crosswall Junctions** 



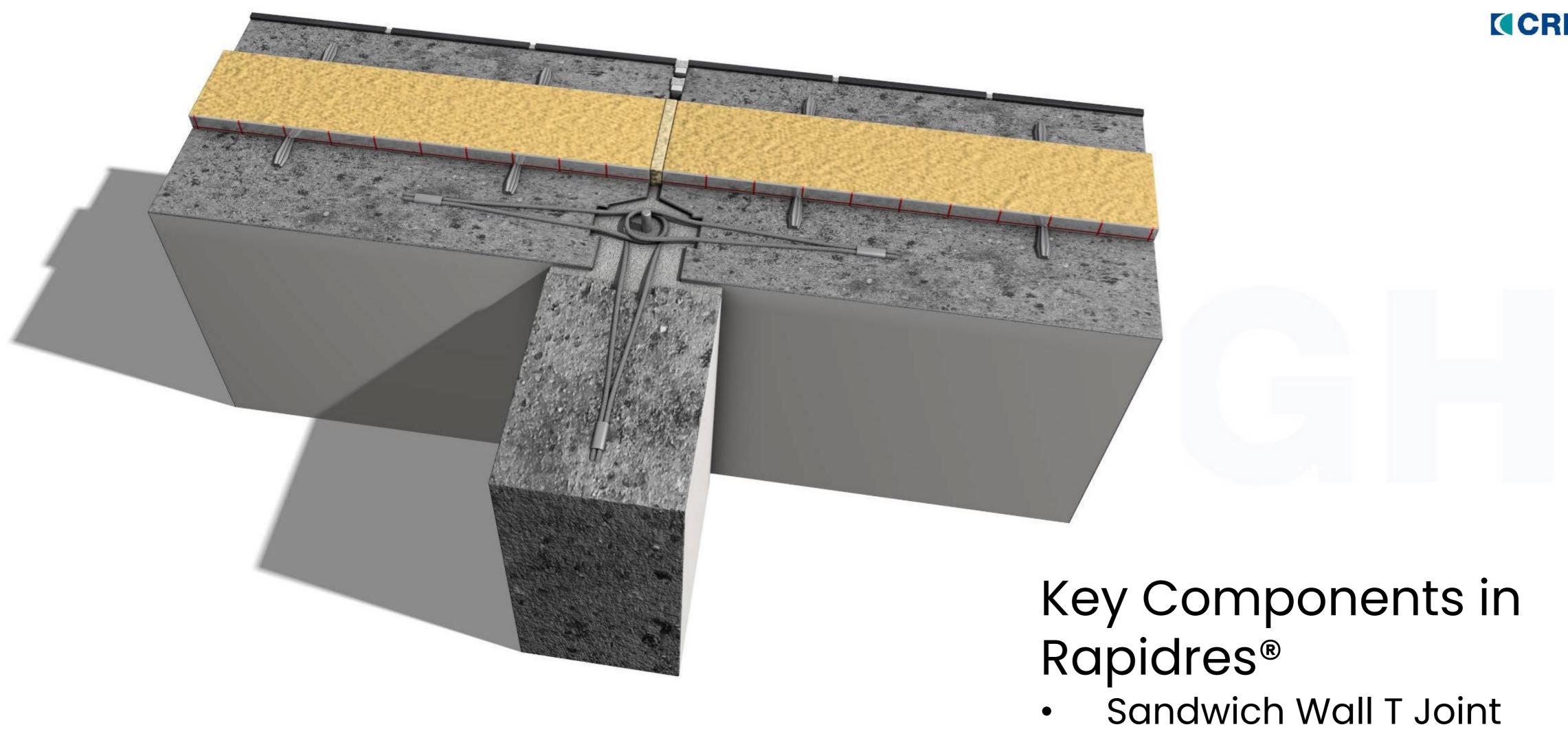






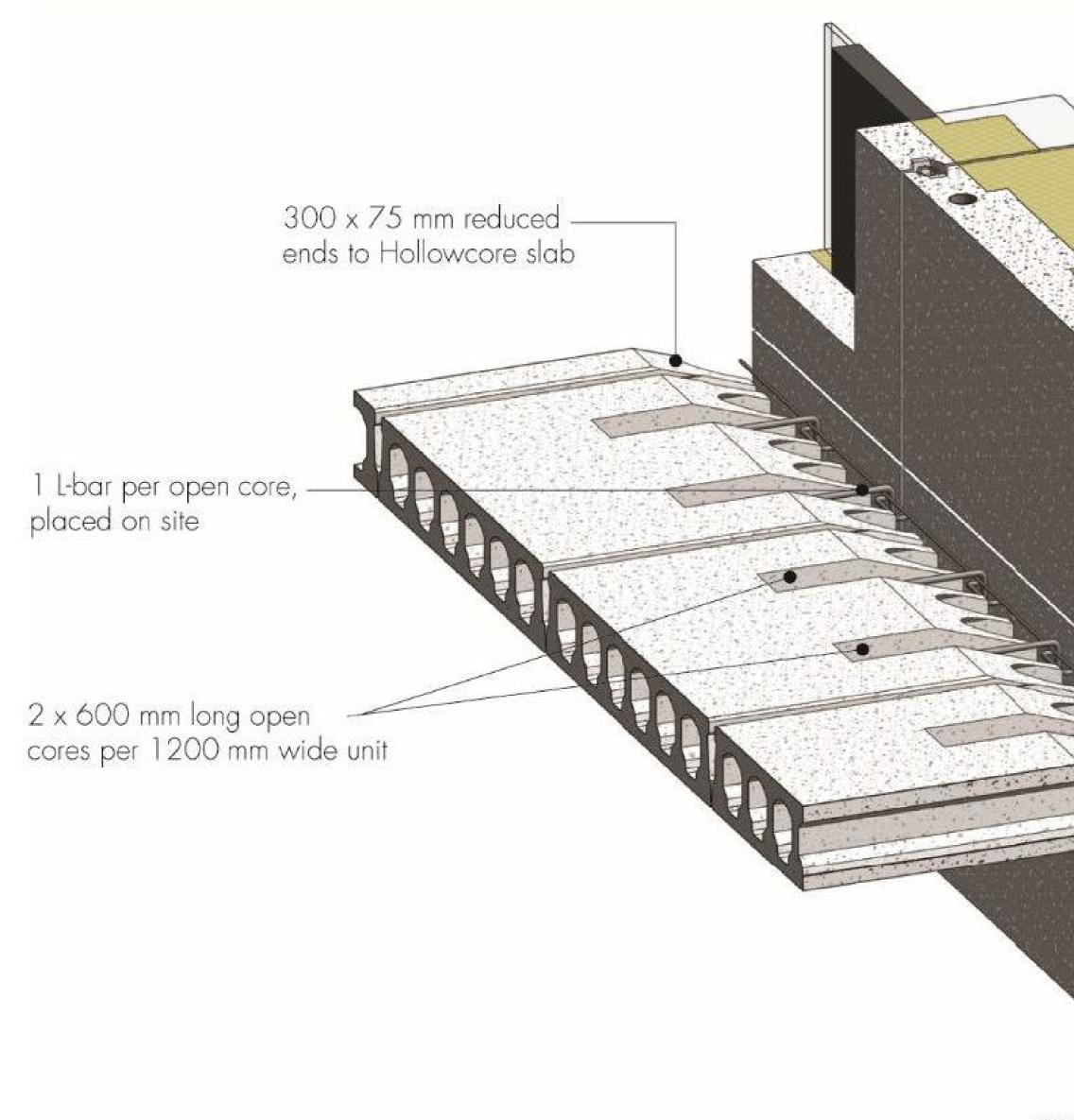
# Key Components in Rapidres® • Wall Bearing













## Key Components in Rapidres®

Typical precast element assembly at *intermediate (precast) floor – side bearing* detail

link cast in to sandwich panel

continuous tie strand around perimeter

cast-in concrete corbe









## Structural stitched and grouted in-situ connections



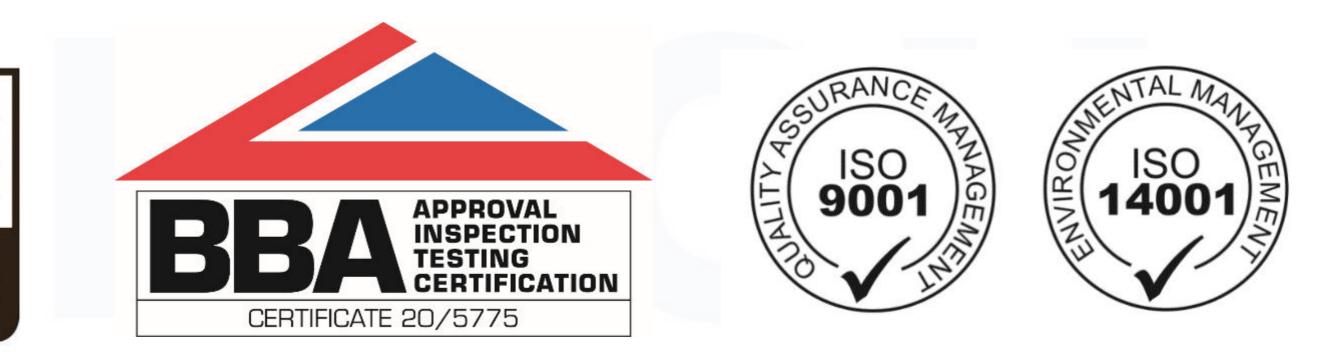


## **BES 6001**

**Responsible Sourcing** 













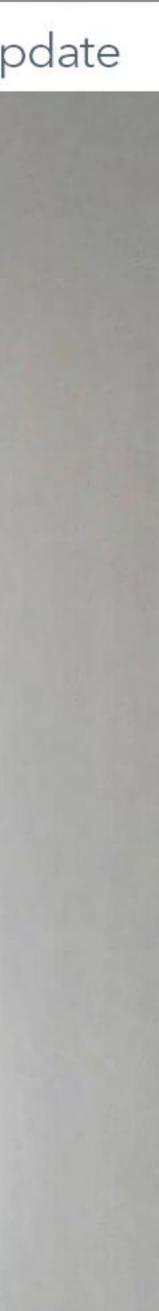


# Internal Finishes





## **CREAGH** St. Martin's Place Update





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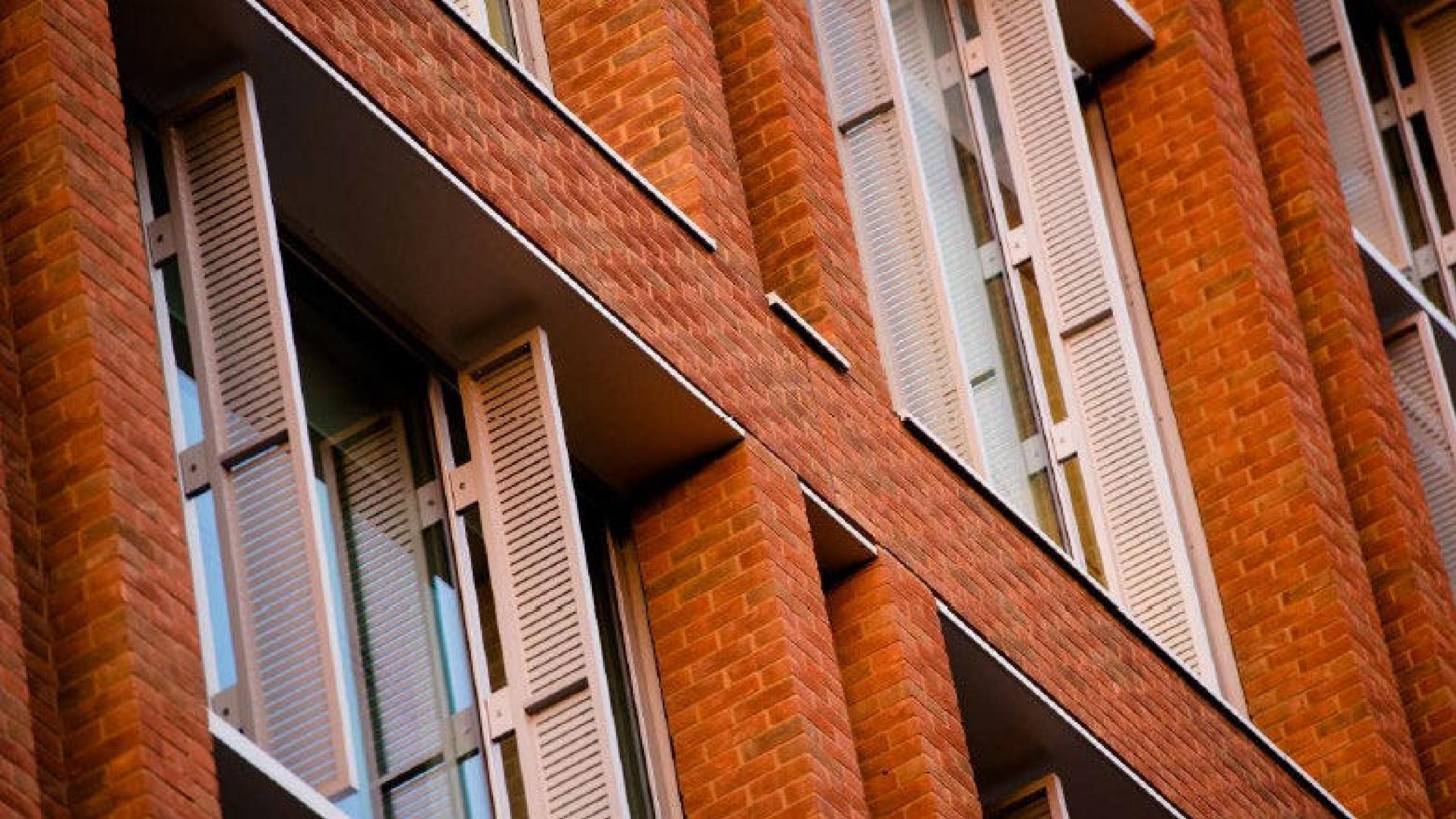
# **External Finishes**

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### ARCHITECTURAL CONCRETE COLOURS

The range allows architects to widen their scope and unleash their creative flair when designing prestigious buildings that require a superior finish.







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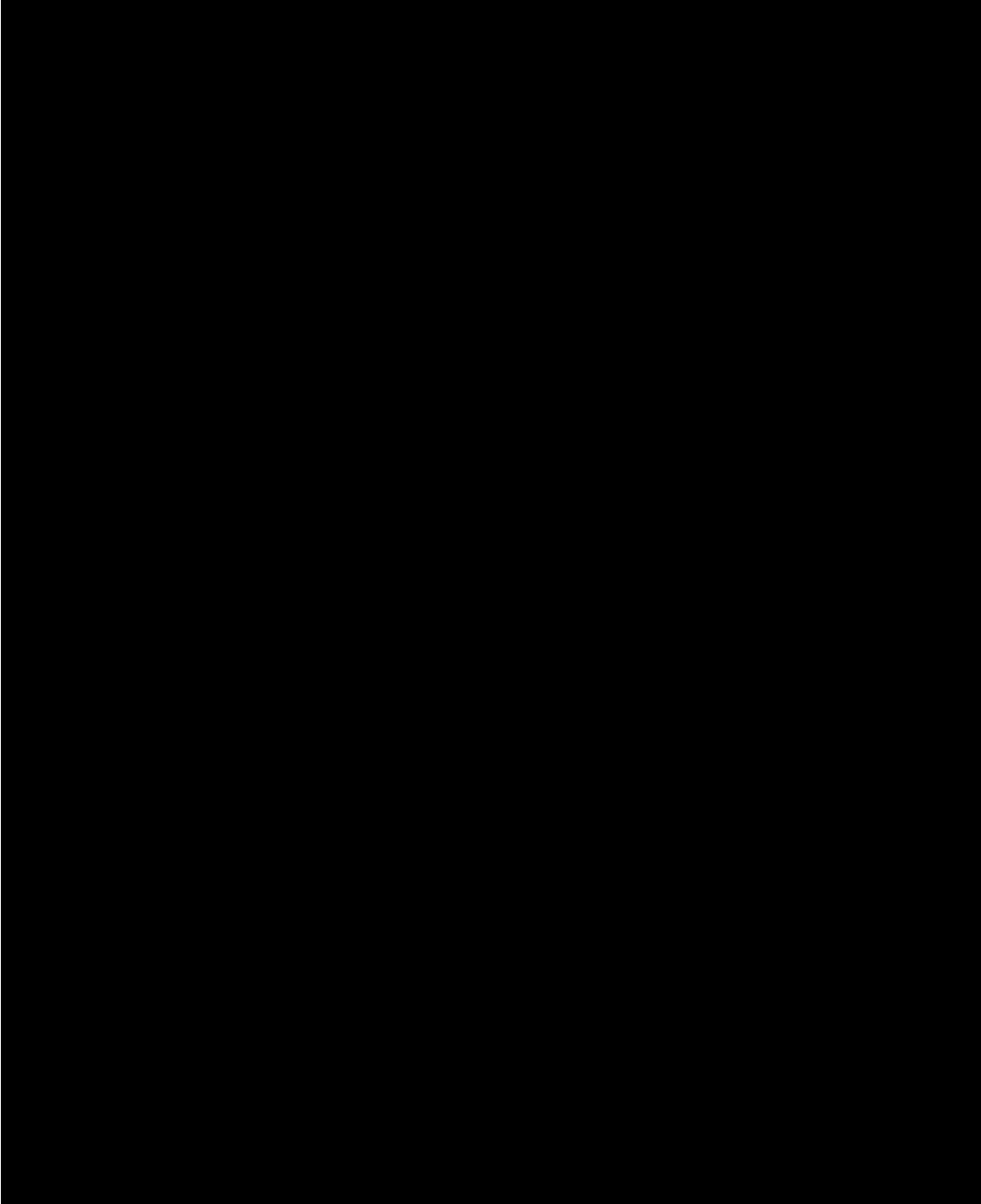
## Timelapse St Martin's Place

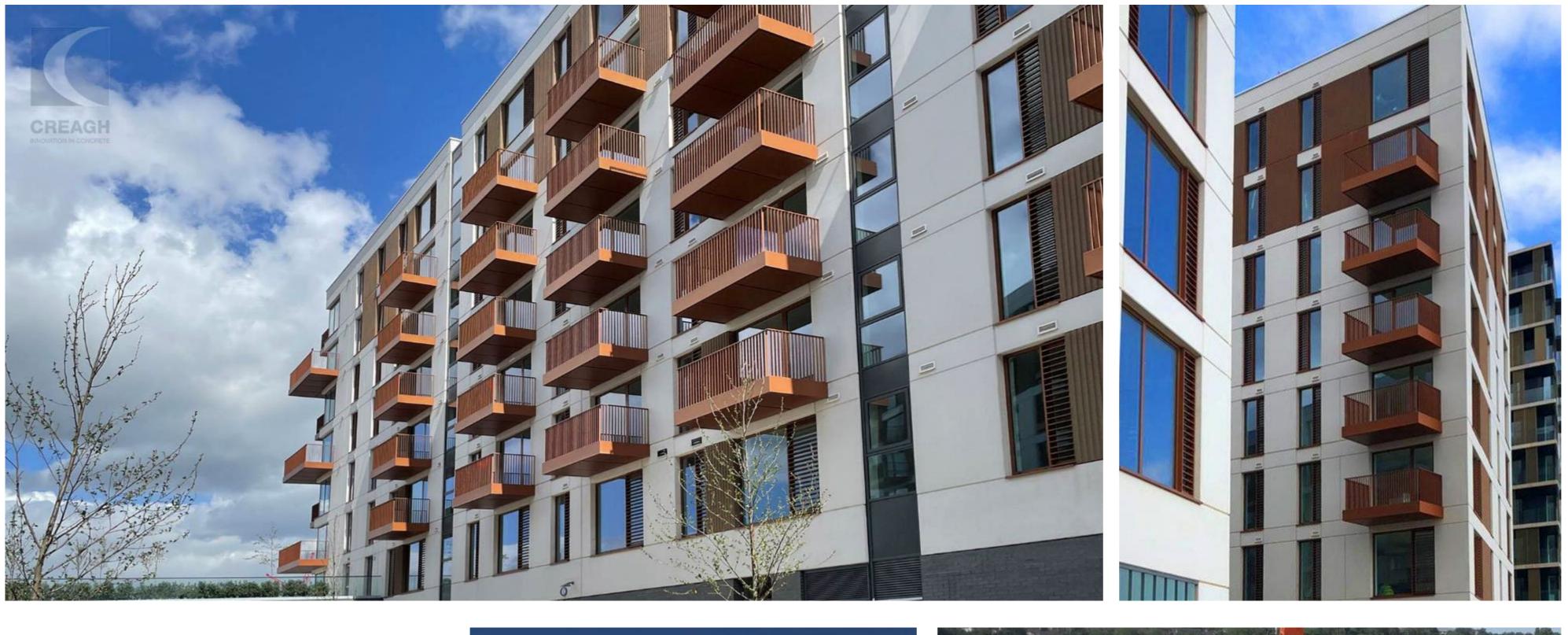




INNOVATION IN CONCRETE







#### **CHATHAM** WATERS, Kent

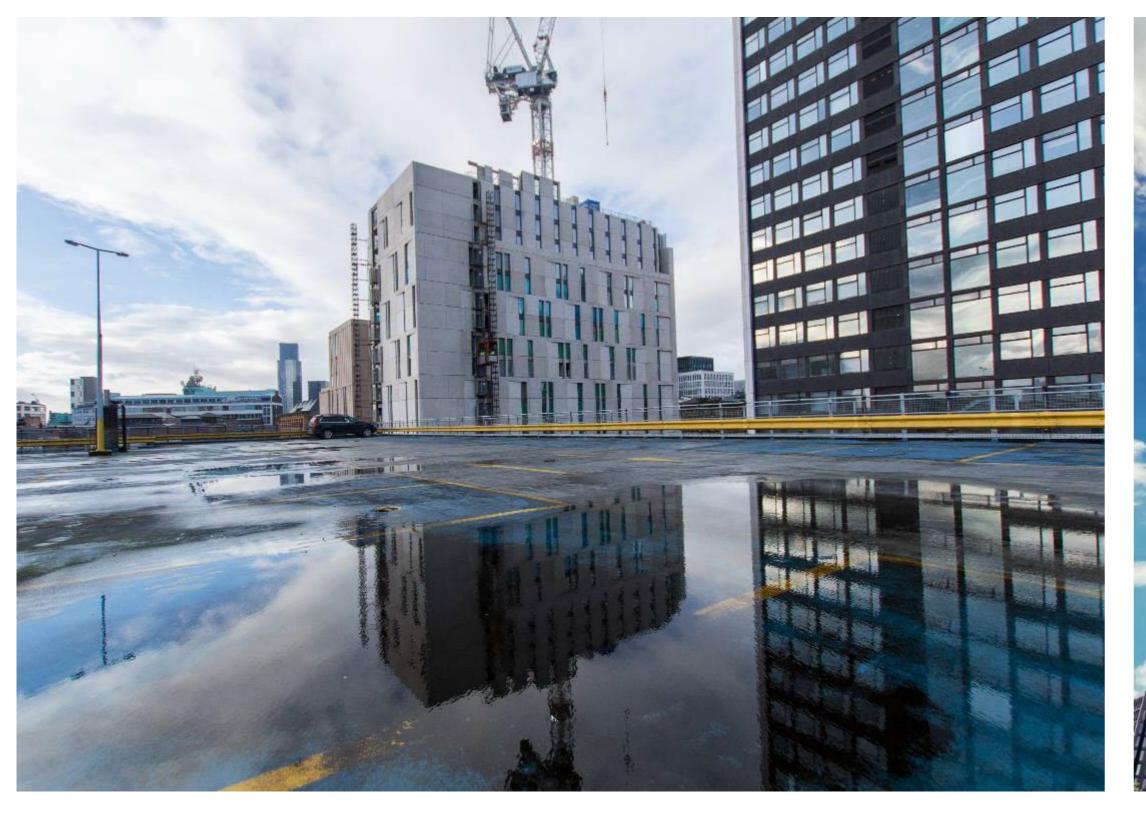






- Residential Apartments
- 2 Blocks
- 200  $\bullet$ Apartments
- Sandwich Panels Porcelain and Copper finish
- 6 Month Project onsite March 20' to October 20'





#### PORTLAND STREET, Manchester









- 1 Block 18 Floors
- 315 Bedroom Hotel
- Finish Recklin Liner-Earth Finish













- 1 Block 400 Bed Residential Apartments
- Finish 2 Types of Acid Etched Concrete & Brick
- Fin Wall arrangement
- **Balconies &** Balustrade installed in factory



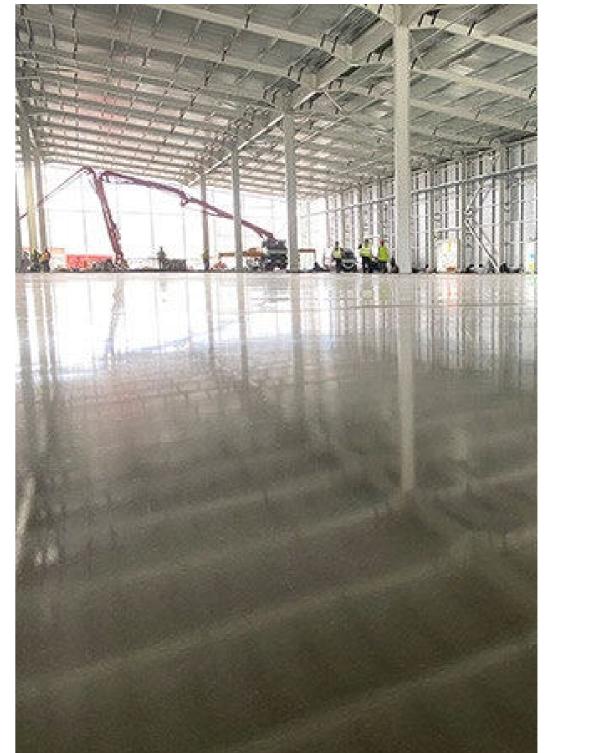






#### Amazon Warehouse, Belfast **Summer 2020**









- 20,000m2 insitu floorslab
- Cladding Wall Panels to lower level

	E avenue
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#### Paddington MSCP, Liverpool







- 2 Cores providing structural stability for steel frame
- Landings and stairs installed within cores
- 20 Storeys



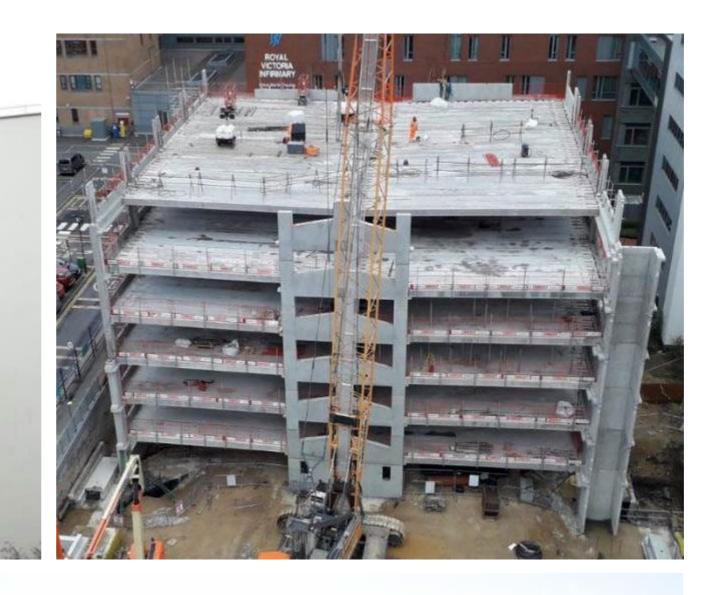




#### Royal Victoria Infirmary, Newcastle











- Holistic Package by Creagh
- Creagh Design & Build
- Concrete columns, beams, floors, stairs and landings supplied and fitted









#### CHANGE WITHIN CREAGH

#### Upskilling Our People

#### Automation in the Production facilities

Leadership at all levels within our company



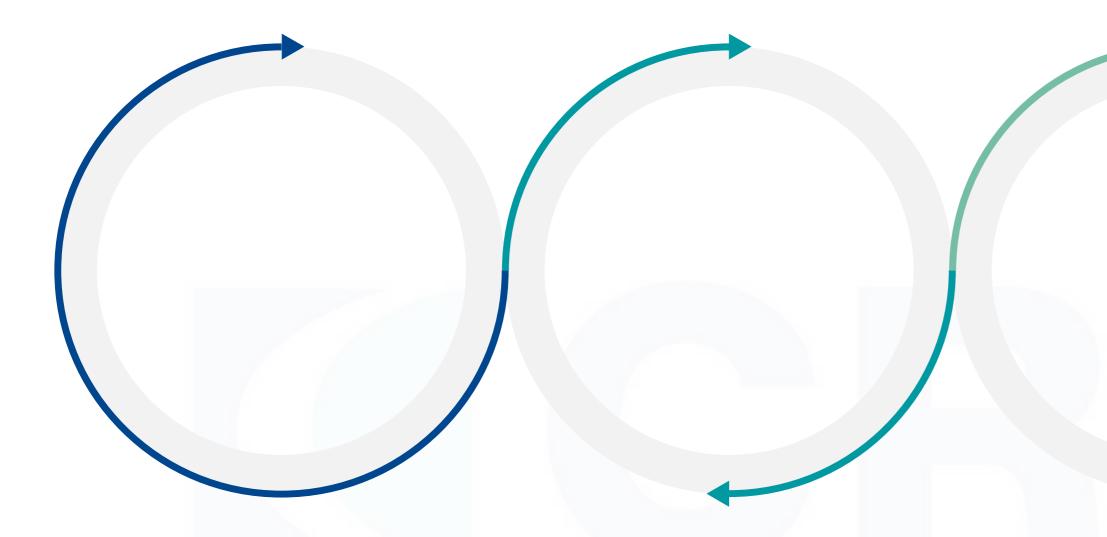
#### Investing in Technology To facilitate design

#### Attracting new talent To our team

# Adding to our product & service offering



#### **CULTURE CHANGES WITHIN CREAGH**



#### Attune Hone our our Business Leadership skills acumen







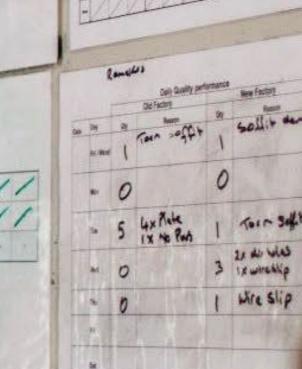
Can-Do attitude In all people

#### Risk Experts Management

INNOVATION IN CONCRETE



## Clarity & Vision Strategy

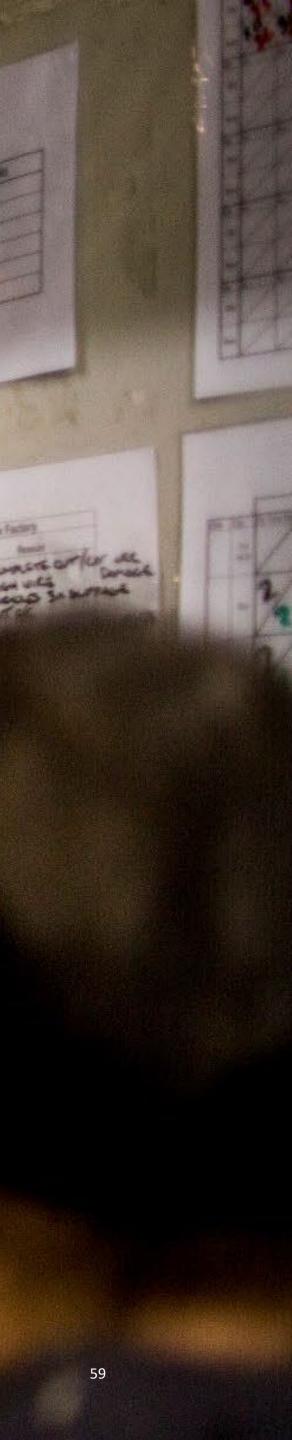


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# Up-skilling our workforce

OFFL

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# Great Relationships with our Customer

rapidres

CITEASIM

rapidres



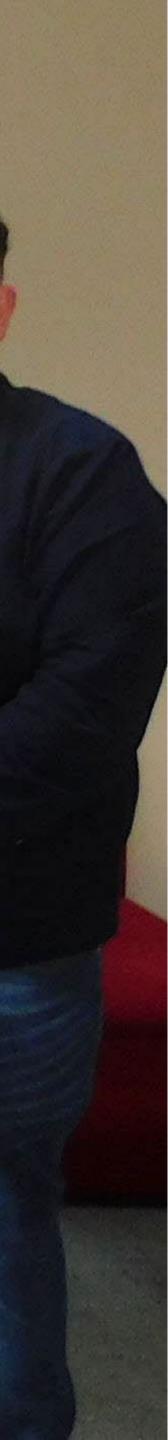
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DO NOT ENTER AUTHORIZED PERSONNEL \*\*

### Training & Development





CREAGH

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#### CREAGH pidres.

### Excellent Internal Communication

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# CREAGH

### Career Progression

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### Teamwork

MEHOF WORKS FAMILIE FAMILIE GLADUT





#### **Customer Focus**

Strive to provide total customer satisfaction at all levels of our business.



Act with integrity, transparency and respectability to all.



Ε

Provide you with relevant, insightful information based upon our years of experience.

#### **CREAGH VALUES**





Deliver our very best in all we do, holding ourselves accountable for results.



Genuine in our approach to delivering innovative, durable, cost effective solutions for our customers.



Professional technical support, before, during and after your construction project.