

SHARING UNITED KINGDOM'S EXPERIENCE IN:  
**PRECISION MANUFACTURING**



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# AGENDA

- 1). Experience of Precision Manufacturing in UK**
- 2). Design Parameters of Precision Manufacturing**
- 3). Videos for Parametric Design and Configurator**

# ARCADIS UK PROJECTS



## GREEN POINT, LONDON

Arcadis worked in collaboration with the developer and manufacturer to create a modular solution for a **6-storey, 98-unit** residential block, breaking it down into **187** standardised modules.

Completed 2015.



## IRWELL RIVERSIDE, MANCHESTER

Arcadis is acting as designer and cost manager for a multi-storey apartment scheme over **3 blocks** in Manchester.

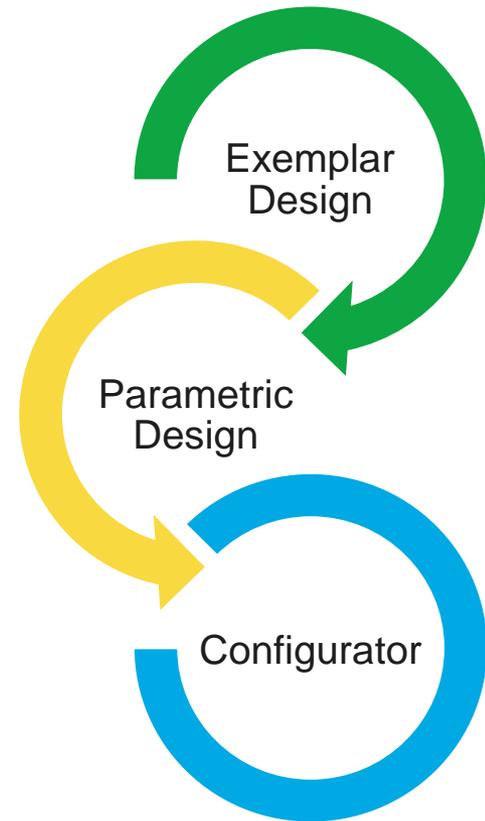
Commenced 2018.

# PRECISION MANUFACTURING- UK

Arcadis UK has developed a range of solutions called **Precision Manufacturing** to deliver factory-manufactured solutions for clients. These are in **design and feasibility**, and then in **procurement and delivery**.

Arcadis UK have been leading the establishment of standardised designs and delivery in UK for the Education Skills and Funding Agency and have driven down **delivery costs of schools by 25%+**.

Having developed standardised designs for the education sector, factory manufactured buildings, we now apply our expertise across other building types, such as **residential**.



# EXEMPLAR DESIGNS

Arcadis has developed exemplar designs for **1,2 and 3 bedroom** apartments which meet client requirements for sale, rent and social housing and comply with regulatory and advisory requirements.

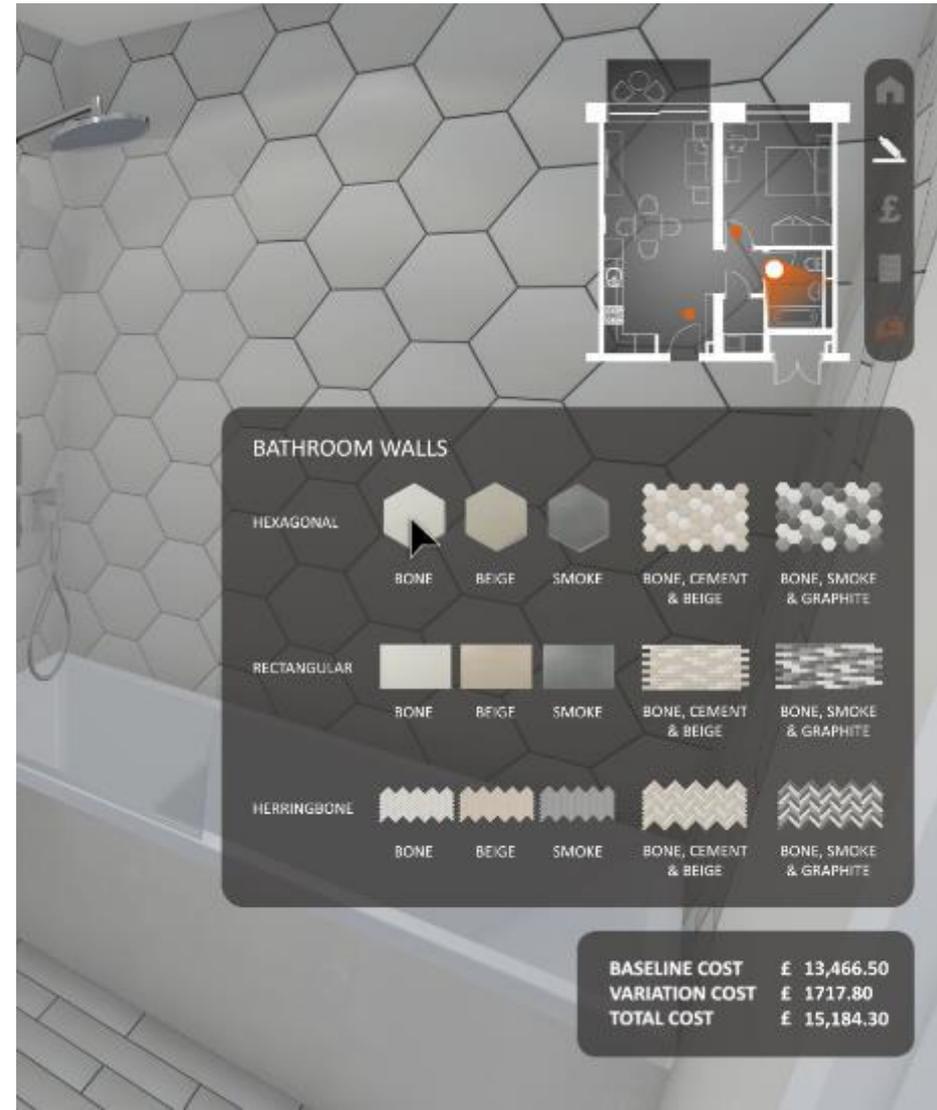
These are **optimized** for volumetric modular delivery to maximise the efficiency of module dimensions. Our suite of exemplars includes **2-storey** houses and other residential formats



# CONFIGURATOR TOOL

Our configurator allows purchasers of our exemplar designs to **personalise** their apartments and homes whilst maintaining the essential dimensions and constraints of a manufactured solution.

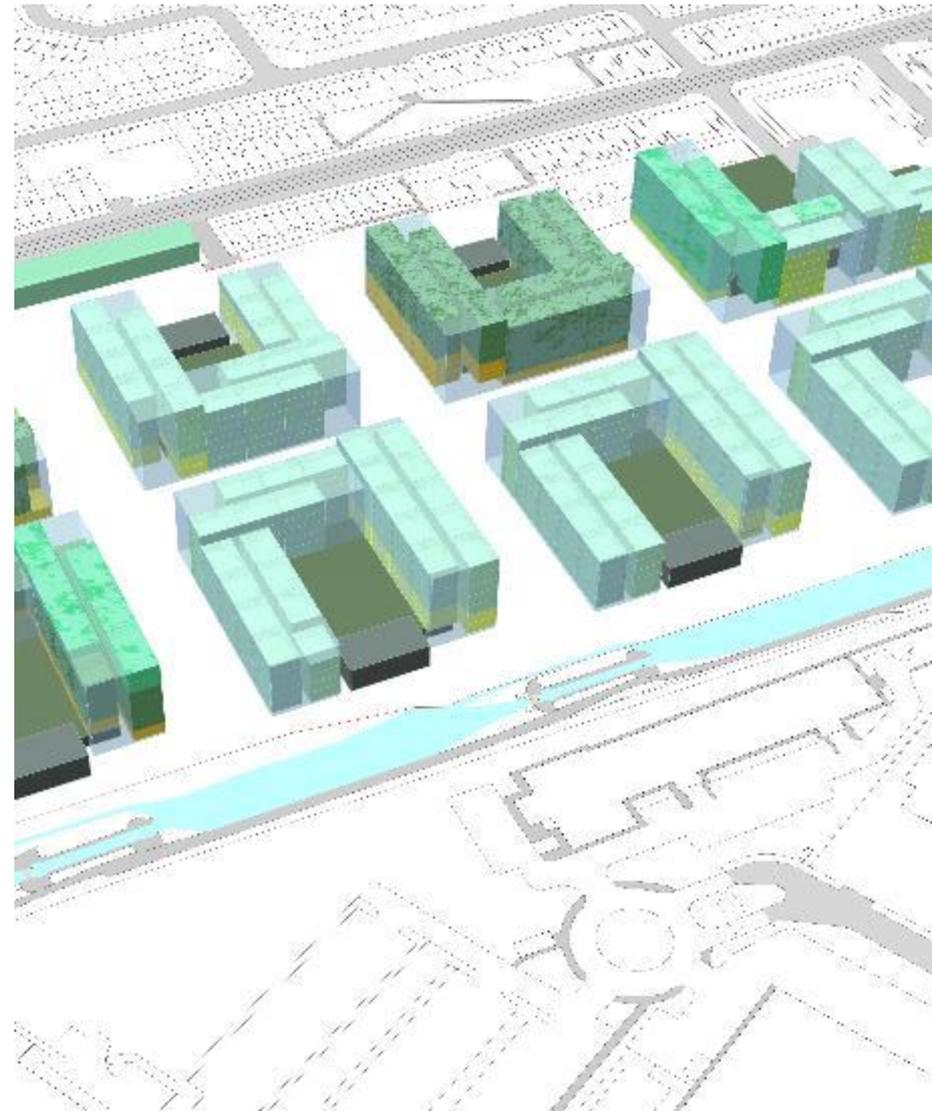
In exactly the same way as an online car configurator it gives them a **3D image** and price for their choices. This is a powerful tool to demonstrate to clients the flexibility that manufactured solutions can provide.

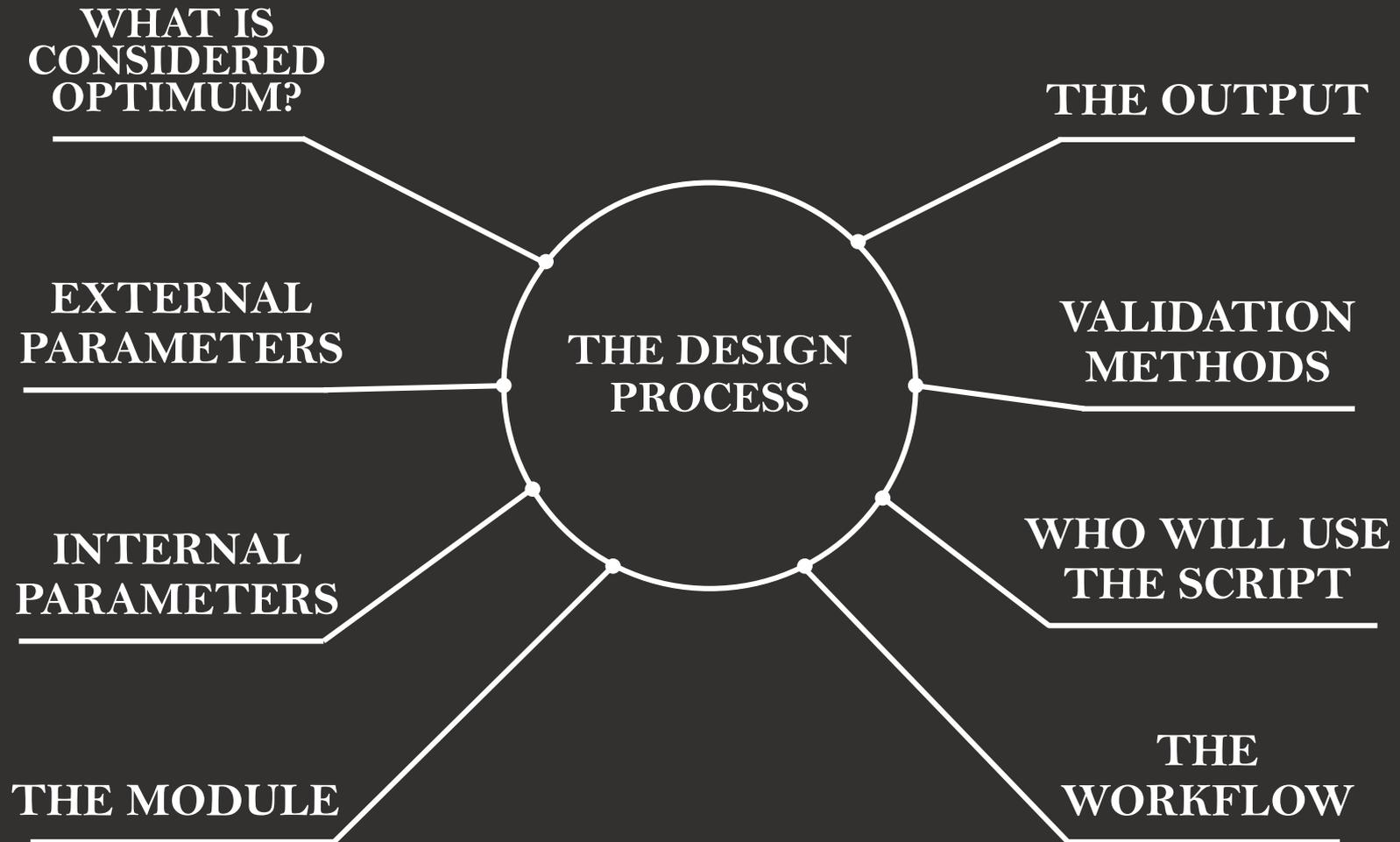


# PARAMETRIC DESIGN

Our parametric design tool has been developed with our in-house digital workshop in Europe.

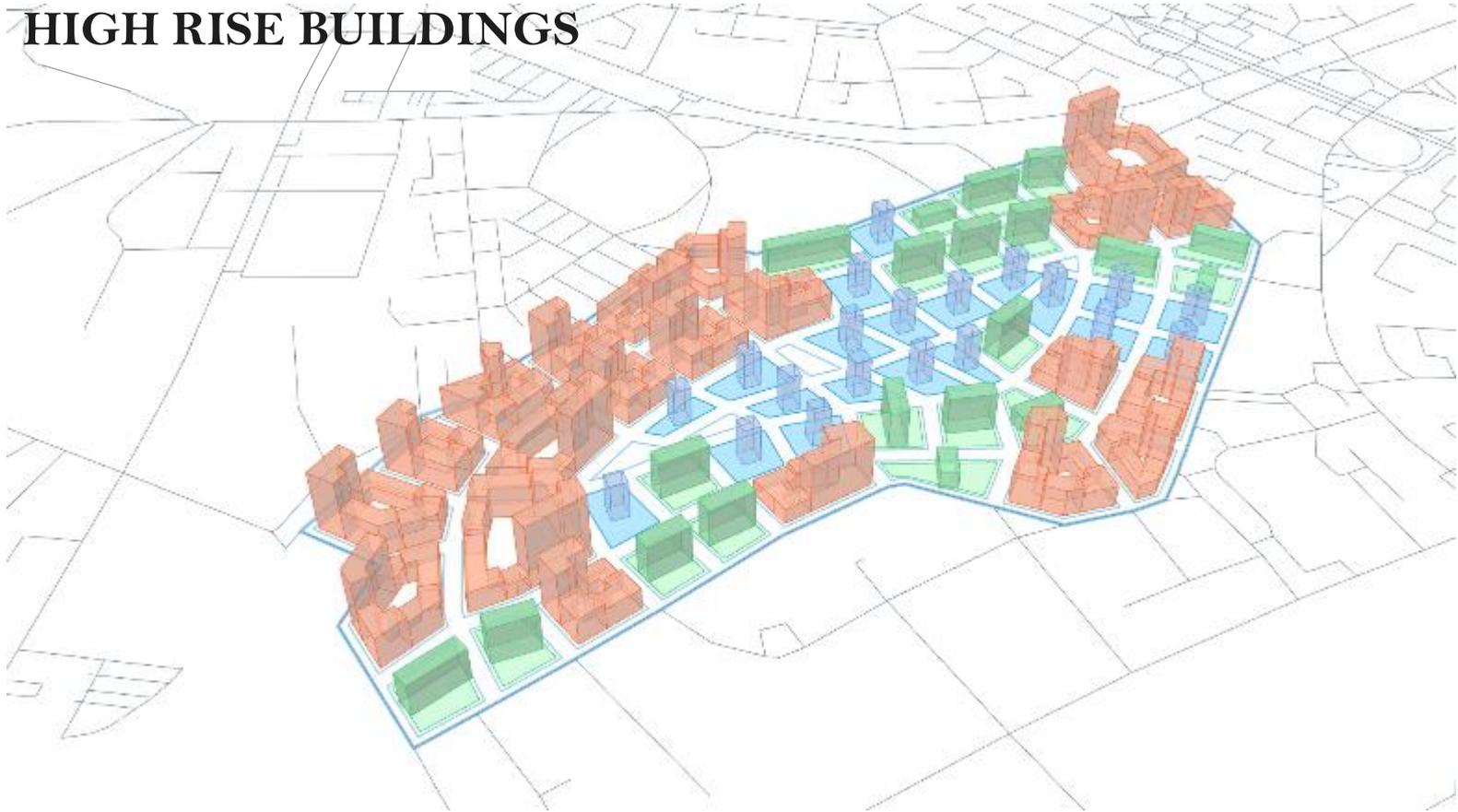
Our tool allows us to **optimise** feasibility designs for residential schemes by applying algorithms utilising our Exemplar designs and precision engineering manufacture, outputting **cost** and value metrics. This gives our clients quick **option solutions** that are optimised for manufacture.





# PARAMETRIC DESIGN

## HIGH RISE BUILDINGS



# Q&A INSIGHTS IN MODULAR INTEGRATED CONSTRUCTION

15 APRIL 2019