



CPQP

CONSTRUCTION PRODUCT
QUALITY PLANNING

Exploring how we will create
a future built on quality

#FutureQuality

Inside CPQP

The CPQP Framework has been developed to ensure consistency of quality and safety across the future of UK construction manufacturing.

Through this 5-part series 'Inside CPQP' we will explore some of the key technical tools that are at the core of the CPQP Framework and how they can benefit enterprises that design, manufacture and use construction products through manufacturing-led approaches.

Explore CPQP

#1. Quality Function Deployment (QFD)

#2. Failure Mode Effect Analysis (FMEA)

#3. Control Plan

#4. 8 Disciplines of Problem Solving (8D)

#5. Verification & Validation Guide (VV)

#1

QUALITY FUNCTION DEPLOYMENT (QFD)

What is it?

QFD is a structured process that helps translate complex customer requirements into easy to interpret technical specifications.

1. QFD

2. FMEA

3. Control Plan

4. 8D

5. VV

Why do we need it?

Identifying what the customer's wants and needs are from the outset is vital to ensuring the success of the product design.

This phase of the design process is often rushed.

However, the more time invested at this stage saves time and money in the long run.

The benefits of QFD

1

Promotion of a collaborative team approach

2

Early understanding and prioritisation of design requirements

3

Shorter development time and lower cost

4

Helps to make trade-off decisions

5

Clear technical design specifications

6

Increases customer satisfaction

7

Effective communication of the customer's wants and needs throughout the organisation

1. QFD

2. FMEA

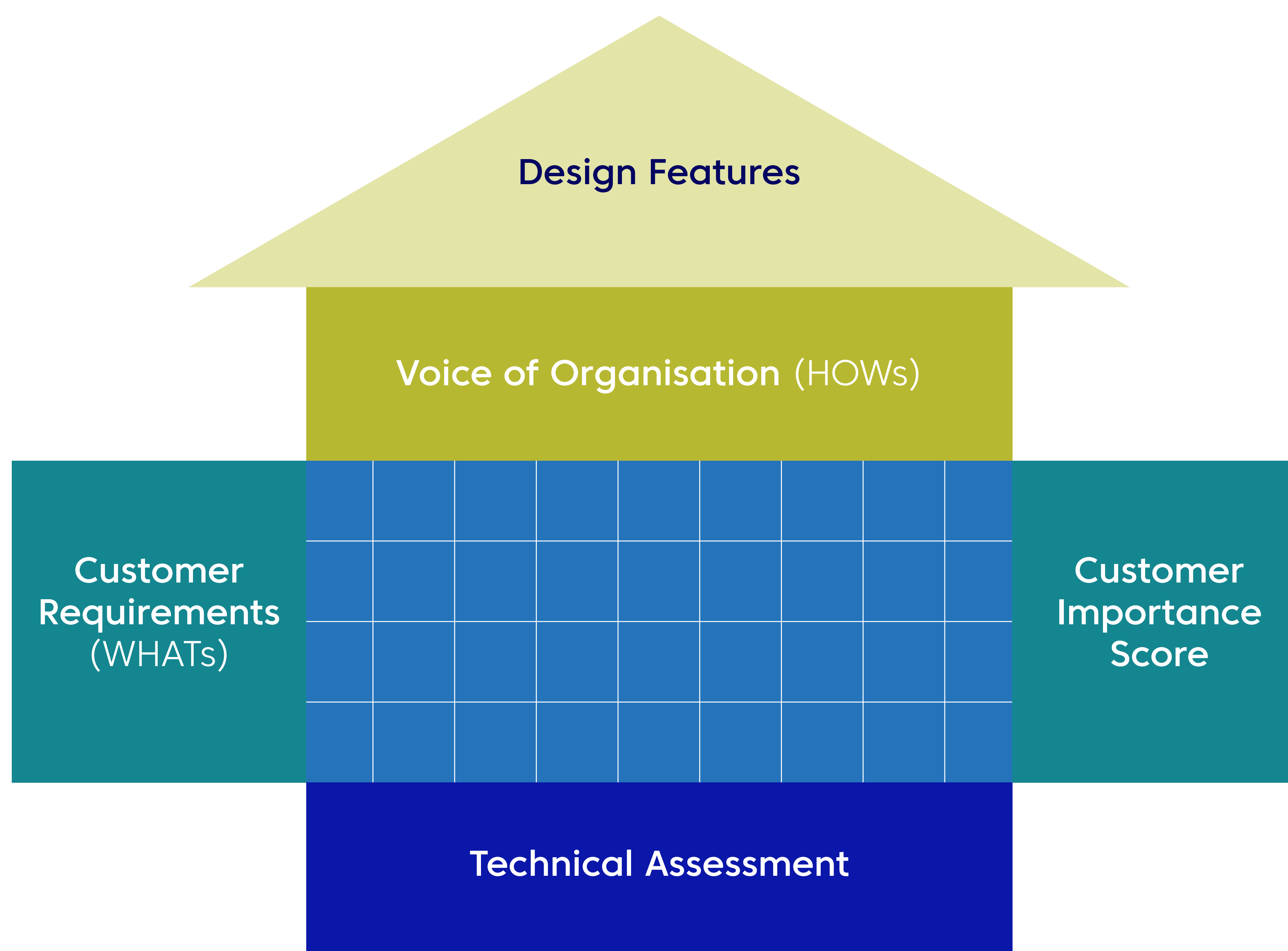
3. Control Plan

4. 8D

5. VV

How does it work?

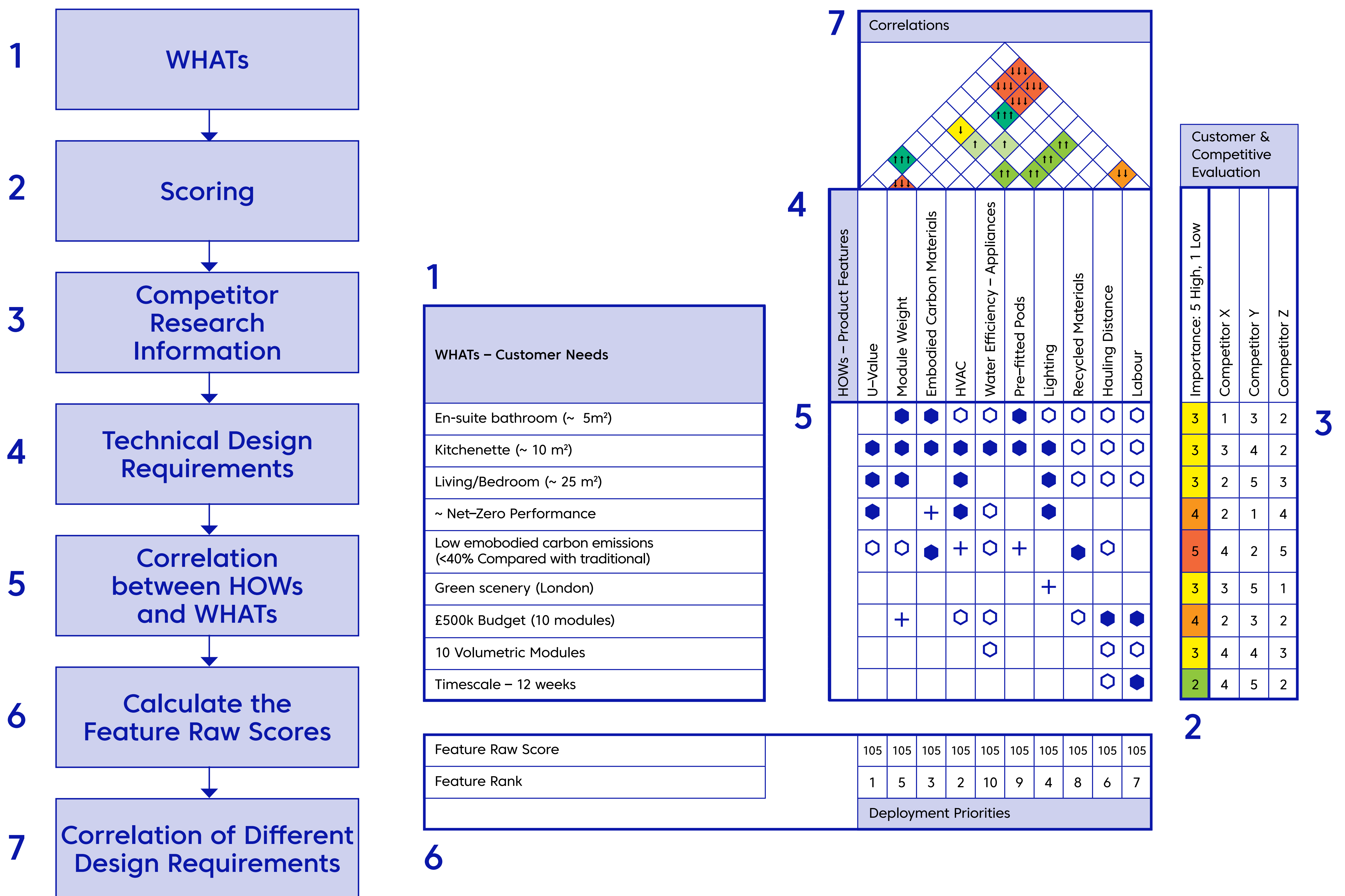
An example of a design tool used within QFD is known as the 'House of Quality'.



This tool provides a structured and collaborative approach to define, rank and prioritise customers requirements and translates them into specific product or service characteristics and specifications.

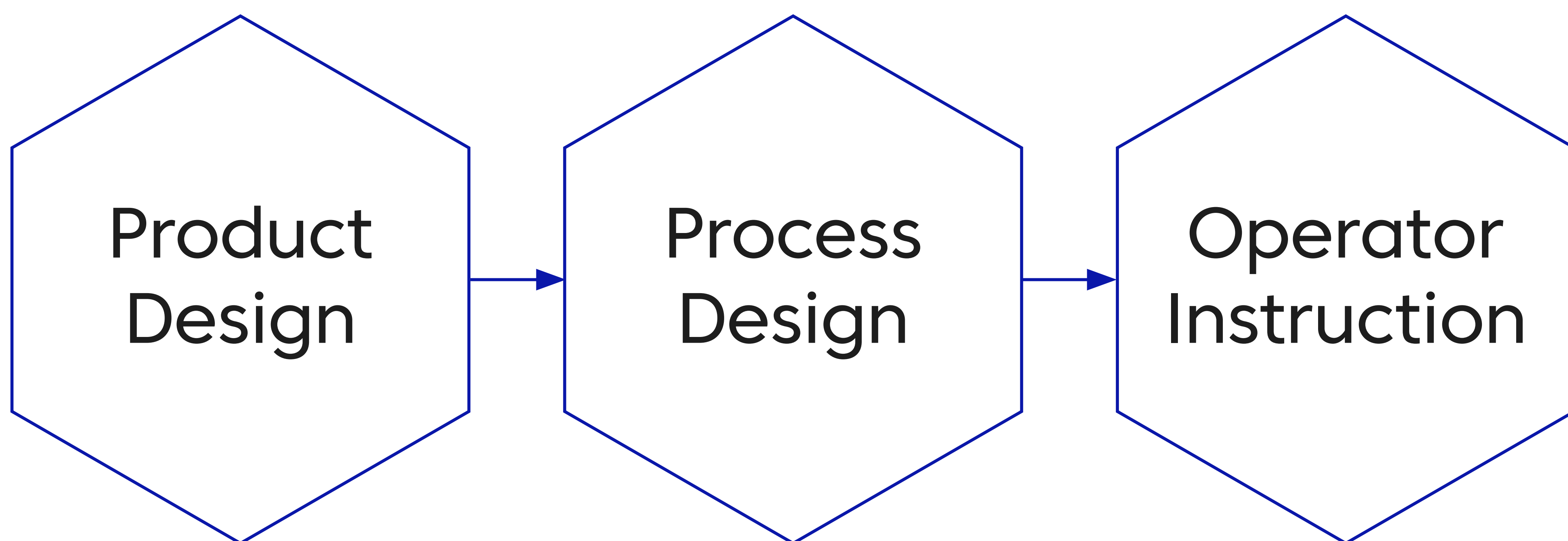
What does it look like in practice?

The 'House of Quality' is carried out through the 7 steps illustrated below.



What else does it do?

The QFD 'House of Quality' extends beyond the technical product planning, into three further stages:



The demand for smart, efficient and sustainable products is building. The QFD toolset helps in translating this demand into easy to interpret technical requirements ensuring a future built on quality.

Get in touch with the Construction Innovation Hub to learn more about how the CPQP Framework and the QFD toolset can help your business.

Please contact:

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Up next in the Inside CPQP series...

Understanding product risks with
Failure Mode and Effect Analysis

1. QFD

2. FMEA

3. Control Plan

4. 8D

5. VV