



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)

---

#4

---

## 8 DISCIPLINES OF PROBLEM SOLVING (8D)

---

### What is it?

8D is a structured problem-solving tool used to help identify, solve and protect against problems that arise during the product development process.

1. QFD

2. FMEA

3. Control Plan

4. 8D

5. VV

---

# Why do we need it?

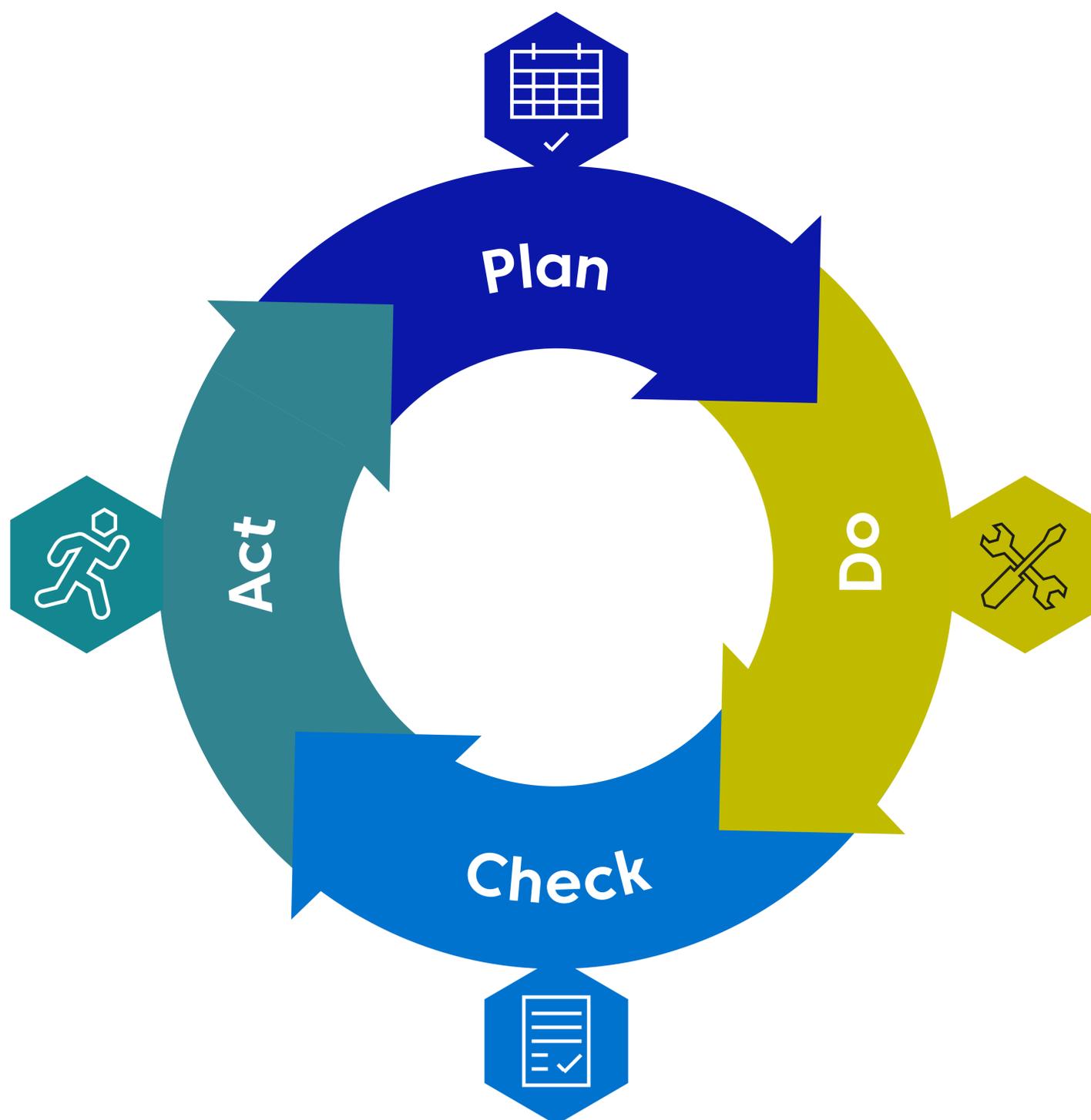
When problems occur and are dealt with reactively, the priority is speed and cost. This often results in a superficial solution that may give rise to the same problem further down the line.

Being able to identify the root cause of a problem and fix it at the source prevents the recurrence of similar problems that result in extended delays and increase costs.

---

# Why do we need it?

Identifying root causes of problems is part of the Plan, Do, Check, Act approach adopted across the whole CPQP Framework.



1. QFD

2. FMEA

3. Control Plan

4. 8D

5. VV

---

# The benefits of 8D

---

## 1

Eliminates the root cause of problems

---

## 2

Encourages a collaborative approach to problem solving

---

## 3

Improves problem solving ability

---

## 4

Reduces the potential for future issues

---

## 5

Develops and improves skills for corrective actions

---

## 6

Improves quality control systems and plans

1. QFD

2. FMEA

3. Control Plan

4. 8D

5. VV

---

# How does it work?

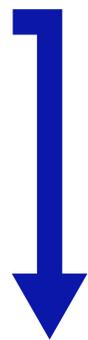
The 8D problem-solving approach covers 8 steps which can be grouped into 4 main stages:



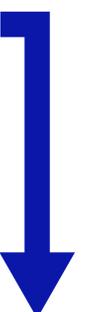
# What does it look like in practice?

The 8D problem-solving methodology has become highly popular as it offers engineering teams a thorough, easy-to-learn structure with clear steps to solving any problem that may arise within a product or production process.

D0		<b>Immediate Containment Action</b>
<b>Containment Actions</b>		
Production line for IWP40004000200 has been stopped and priority given to other parts needed for VG Construction.		



D1		<b>Form the Team</b>		
<b>Position</b>	<b>Name</b>	<b>Contact Number</b>	<b>Email</b>	<b>Signature</b>
Production Manager	James Porter	0209 111 2222	jporter@example.com	



D2		<b>Problem Definition</b>
<b>Failure Description</b>		The insulation has debonded from the face sheet on a batch of fifteen insulated wall panels (IWP40004000200) that arrived on the 13th May 2018 which were to be used on 14th May 2018. It could be seen that approximately an average of 50% of the sheets were debonded on each panel. Construction staff reported it to the site project manager, Anne Green, who in turn reported the issue to MMC LTD.



---

The deployment of the 8D problem solving tool enables a collaborative approach to problem solving in order to prevent unnecessary and repetitive problems arising in future.

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

Please contact:

[cpqp@constructioninnovationhub.org.uk](mailto:cpqp@constructioninnovationhub.org.uk)

---

Up next in the Inside CPQP series...

**Verification & Validation Guide**

1. QFD

2. FMEA

3. Control Plan

4. 8D

5. VV