

# Design for avoidance of Working at Height by Prefabrication

## The Problem/Challenge

Avoiding working at height by craning in large pieces of structure eg. Pod constructions, roof plant modules and dormer windows.

## The Risks

Heavy lifting of large pieces of structure with associated personal risks and damage to the building. Future replacement access problems after hoisting capacity removed. Usually some residual working at height issues to be resolved.

## The Solution

Early identification of the issues to the client and designers . Off-site manufacture as much as possible. Use low maintenance materials wherever possible to minimise future work at height, but remember quality of materials in relation to societal expectations of building eg. High end residential as opposed to worker housing.

## The Benefits

Future replacement of large pieces of equipment can be facilitated in an easier manner. Alternatively scaffolding or other access strategies necessary.

## Key Points

Review the hoisting, lifting and access issues ideally with the principal contractor as early as possible. Economy of scale of repeat design to be considered. One off elements are rarely economic with prefabrication.

